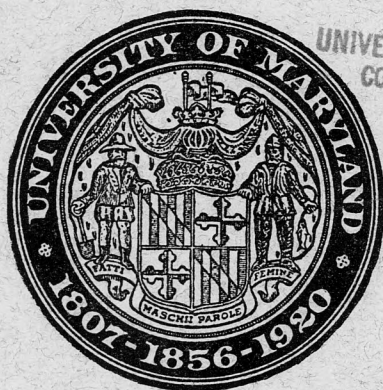


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THIRTEENTH ANNUAL REPORT

UNIVERSITY OF MARYLAND

EXTENSION SERVICE



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FOR THE YEAR 1927

Cooperative Extension Work In Agriculture and Home Economics
Extension Service, University of Maryland, and the
United States Department of Agriculture
Co-operating.

T. B. SYMONS, Director

Distributed in furtherance of acts of Congress of
May 8 and June 30, 1914.

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† R. A. JEHLE	Specialist in Pathology.
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† W. T. L. TALIAFERRO	Specialist in Farm Management.
† C. E. TEMPLE	Specialist in Pathology.
F. B. TRENK	Specialist in Forestry.
A. F. VIERHELLER	Specialist in Horticulture.

COUNTY DEMONSTRATION AGENTS

County	Name	Headquarters
Allegany	* R. F. McHenry	Cumberland
Anne Arundel	* S. E. Day	Annapolis
Baltimore	* W. C. Rohde	Towson
Calvert	* J. B. Morsell	Prince Frederick
Caroline	* T. D. Holder	Denton
Carroll	* L. C. Burns	Westminster
Cecil	* T. H. Bartilson	Elkton
Charles	* G. R. Stuntz	La Plata
Dorchester	* W. R. McKnight	Cambridge
Frederick	* H. R. Shoemaker	Frederick
Garrett	* J. L. McGlone	Oakland
Harford	* H. M. Carroll	Bel Air
Harford	* W. H. Evans (Assistant)	Bel Air
Howard	* J. W. Magruder	Ellicott City
Kent	* H. B. Derrick	Chestertown
Montgomery	* O. W. Anderson	Rockville
Prince George's	* W. B. Posey	Upper Marlboro
Prince George's	* P. L. Clark (Assistant)	Upper Marlboro
Queen Anne's	* E. W. Grubb	Centerville
St. Mary's	* G. F. Wathen	Loveville
Somerset	* C. Z. Keller	Princess Anne
Talbot	* R. S. Brown	Easton
Washington	* M. D. Moore	Hagerstown
Wicomico	* J. P. Brown	Salisbury
Worcester	* R. T. Grant	Snow Hill

LOCAL AGENTS

* J. E. Armstrong (col.)	Southern Maryland	Seat Pleasant
* L. H. Martin (col.)	Eastern Shore	Princess Anne

* In co-operation with the U. S. Department of Agriculture.
† Devoting part-time to Extension Work.

(Continued on Third Cover Page)

THIRTEENTH ANNUAL REPORT
UNIVERSITY OF MARYLAND

EXTENSION SERVICE



FOR THE
YEAR 1927

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(Continued on Third Cover Page)

THIRTEENTH ANNUAL REPORT
UNIVERSITY OF MARYLAND
EXTENSION SERVICE



FOR THE
YEAR 1927

LETTERS OF TRANSMITTAL

DR. R. A. PEARSON,

President, University of Maryland:

I have the honor to submit herewith the Thirteenth Annual Report covering the work of the Extension Service of the University of Maryland, in co-operation with the U. S. Department of Agriculture, for the calendar year 1927, together with a financial report for the fiscal year ending June 30, 1927.

Respectfully submitted,

THOMAS B. SYMONS,

Director, Extension Service.

January 1, 1928.

HON. S. M. SHOEMAKER,

Chairman, Board of Regents:

In accordance with the requirements of the Act of Congress, approved May 8, 1914, and known as the Smith-Lever Act, I have the honor to transmit herewith, for submission to the Governor of the State, the Thirteenth Annual Report covering the work of the Extension Service of the University of Maryland, in co-operation with the U. S. Department of Agriculture, for the calendar year 1927, together with a financial report for the fiscal year ending June, 1927.

Respectfully submitted,

R. A. PEARSON,

President.

January 1, 1928.

TO HIS EXCELLENCY ALBERT C. RITCHIE,

Governor of Maryland:

I have the honor to transmit herewith the Thirteenth Annual Report covering the work of the Extension Service of the University of Maryland, in co-operation with the U. S. Department of Agriculture, submitted to me through the President of the University.

Respectfully submitted,

S. M. SHOEMAKER,

Chairman, Board of Regents.

January 1, 1928.

THIRTEENTH ANNUAL REPORT
OF THE
UNIVERSITY OF MARYLAND
EXTENSION SERVICE
FOR THE YEAR 1927.

BY THOMAS B. SYMONS, *Director.*

Introduction

Economic tendencies of the past year have been, in the main, favorable to the Maryland farmer.

The improvement that has taken place, however, has not been pronounced and Maryland farmers have not experienced the heightened prosperity that has been so much in evidence in certain specialized agricultural sections of the country during the year. This does not mean that Maryland farmers have not shared in the generally improved economic situation but rather that the State, with its well balanced system of agriculture, was little affected by the regional depressions of the previous year.

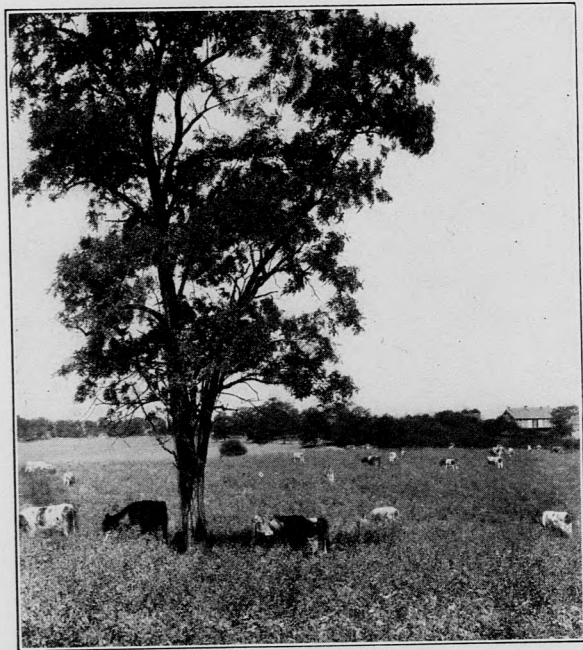
It is certain, however, that the year 1927 would have come to a close with agriculture in a far less satisfactory position had weather conditions during the late summer and early fall not been highly favorable. Weather conditions during much of the growing season were uncertain in the extreme and there were many indications to point to a most unsatisfactory crop year.

Weather Conditions Dubious

The year started off with a rather dubious outlook for the wheat crop, much of which had been seeded late and came through the winter in unpromising condition. Fortunately the crop encountered favorable conditions in the spring and just prior to harvest and while production was below that of

a year ago, the output was estimated at 9,188,000 bushels yielding at the rate of approximately 17.5 bushels per acre.

The growing season for corn was likewise most discouraging. Farmers were late with their planting and cool weather retarded growth of the crop until the summer was well advanced. Fall frosts and freezes, however, were delayed and the crop with extended time for maturity gave an estimated production of 22,660,000 bushels, the average yield being 44 bushels per acre.



A Sweet Clover Demonstration in Montgomery County,
showing the value of the crop as a pasture for
Dairy Cattle

Uncertainty likewise surrounded the production of many of the other important crops of the State. Apples and peaches were both curtailed in production by cold weather during the budding period. Wildfire for a time menaced the tobacco crop in Southern Maryland and canning crops, particularly sweet corn, were produced under trying weather conditions.

Notwithstanding the vagaries of the weather, most crops came through the season with production records that were far better than had been anticipated. Prices, too, showed a tendency to offset some of the effects of decreased production. Fruit crops, particularly, were marketed to good advantage in contrast to the previous season when orchards produced more abundantly. The potato crop was the outstanding success of the year, production being estimated at nearly five and a quarter million bushels in comparison with 3,510,000 bushels produced in 1926. With the increased production and the satisfactory price level maintained for the early crop, potato growers experienced a generally profitable season. Other truck crops moved to market in larger volume than in 1926 with fair prices prevailing.

Prices Advance Slightly

Livestock prices advanced moderately during the year, except in the case of swine. The dairy industry continued on a sound basis with indications of expansion in several counties. Prices for poultry were somewhat lower than during 1926 but eggs were in good demand. There was a bountiful production of hay and pastures were good throughout the year.

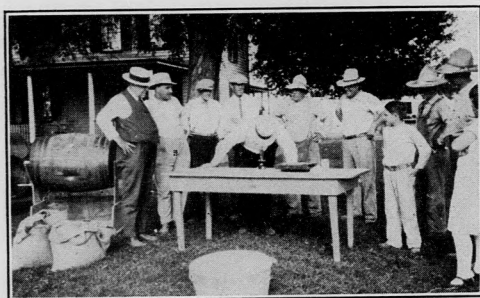
On the whole the year has witnessed a reasonably good production of crops. Prices for farm products have tended upward for the most part and farmers have also received some benefit from the decline in prices of the things they buy. It must be said, however, that the farmer continues to be handicapped in maintaining a satisfactory standard of living and that the financial position of agriculture calls for the careful consideration of all those who are interested in promoting a well rounded national prosperity.

In addition to its usual program for the development and advancement of the State's agriculture, the Extension Service encountered a number of special problems during the year which called for immediate action. The most important of these, perhaps, was the situation confronting wheat growers as a result of the increased infestation and greater spread of stinking smut.

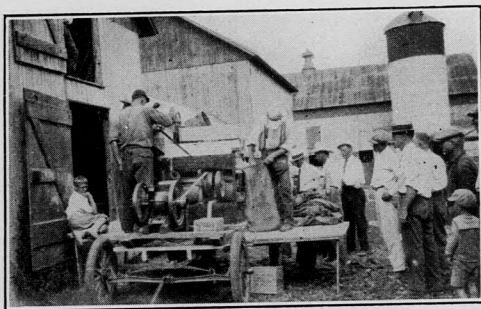
Campaign to Control Smut

A campaign against the disease had been launched the previous year. A survey of wheat fields prior to the 1927 harvest and reports from millers, elevator owners and buyers, however, made it plain that more intensive efforts would be necessary to check the losses which farmers were suffering.

INCIDENTS DURING THE INTENSIVE CAMPAIGN TO CONTROL WHEAT SMUT.



To the left—Farmers are examining smut spores through a microscope.



To the right—A commercial treating machine is in operation.

A carefully planned campaign was conducted during the late summer and early fall months to encourage greater numbers of farmers to treat seed wheat with copper carbonate dust. Efforts particularly were centered upon securing the necessary equipment for treating wheat. Commercial treating machines were available in many of the counties and such equipment was supplemented by numerous home-made devices. More than 200,000 bushels of seed wheat were treated as a result of the campaign, it is estimated, so that losses on the 1928 crop should be materially lessened.

Seed Corn Work

The corn crop likewise called for intensive efforts to safeguard it against losses from defective seed. The crop of 1926 matured under most unfavorable conditions and early in 1927 there was a scarcity of good seed in the State. The situation, however, was brought forcefully to the attention of farmers and numerous demonstrations and meetings were held to acquaint farmers with methods of determining good seed corn. Sources of good seed likewise were located wherever possible so that most localities were able to supply their own seed requirements. Unquestionably the 1927 corn crop, which started under none too favorable conditions, would have been materially reduced had it not been for this work.

Seed Certification Progresses

Seed certification work, begun by the Extension Service a number of years ago as a means of encouraging the production of better seed in the State, showed splendid progress during the year. Inspections were made for 121 farmers and involved more than 1,126 acres of potatoes, sweet potatoes and wheat, the three crops for which seed certification is now provided.

Results of the work with potato growers were particularly noteworthy and indicated very definitely the importance with which the average grower of potatoes now regards good seed stock. In all there were 421 acres of potatoes under inspection during the year and approximately 40,000 bushels were certified for 74 growers in ten counties. Maryland growers not only succeeded in producing sufficient seed for their own requirements but sold considerable quantities to out-of-State buyers at prices averaging \$1.50 per barrel above ordinary stock.

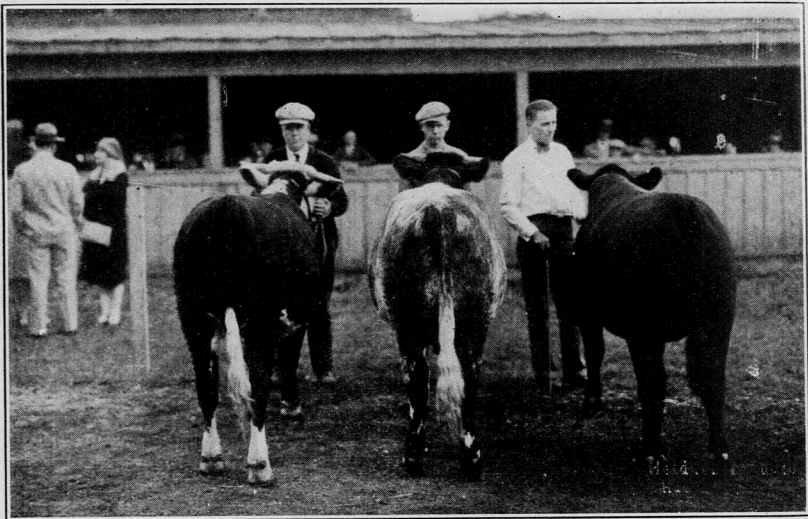
The benefits of seed certification work are far reaching and the results of the past year are most encouraging. The distribution and greater use of high grade seed in Maryland mean much to the agriculture of the State in increased yields and in products which can be marketed to better advantage.

Livestock Industry Aided

Work looking to the improvement of the livestock industry developed a number of outstanding features during the year.

The Extension Service co-operated with the Baltimore and Ohio Railroad in the operation of a special train designed to stimulate high quality beef production. Both consumers and producers were reached and a number of purebred bulls were sold to farmers during the week the train was operated in Maryland.

Interest in production of high quality beef cattle was likewise stimulated during the year through a demonstration in the production of baby beefs by fifteen 4-H club members of Washington County. A special exhibit of these animals at the Hagerstown Fair and the fine prices which they subsequently



Prize winning baby beef raised by Washington County 4-H Club members in 1927.

brought at public auction served to focus public attention upon the possibilities of producing high quality beef under Maryland conditions. The splendid co-operation of the Hagerstown Fair Association and the local Kiwanis Club did much to make the enterprise a success.

Interest in improving the quality of sheep grown in Maryland continued during the year and two sales of purebred rams were held, one at College Park, and the other at Centerville.

The sale at Centerville aroused keen interest and breeders who consigned animals to this sale received most satisfactory prices. An interesting feature of these sales was the fact that all consignments were from Maryland breeders. The sales were held by the Maryland Sheep Growers' Association with the Extension Service co-operating.

Poultry Work Valuable

Certification of poultry as a means of improving the breeding flocks throughout Maryland made outstanding progress during the year. As in former years, the work was done through the Maryland State Poultry Association with the



Poultry Certification under way on a large commercial farm in Carroll county.

University of Maryland Extension Service co-operating. The widespread interest in this work was shown during the summer when several hundred poultrymen, representing all branches of the industry, attended a meeting at College Park to discuss changes in requirements and plans for promoting the certification project. Certification was provided for 39 flocks during the year.

One of the most interesting and valuable poultry meetings of the year was held on the farm of Mr. and Mrs. H. M. Baker,

Kent County. More than six hundred poultrymen and others interested in turkey production were given an opportunity to study the successful methods in hatching, brooding and rearing more than a thousand turkeys produced on this farm.

Advances in Marketing

There were some outstanding developments in marketing during the year. Foremost among them, perhaps, was the successful work of a quotations committee in the marketing of the early potato crop on the Eastern Shore. Partly as an outcome of this attempt to improve marketing conditions, the potato crop was sold at good prices despite a record production.

Shipping point inspection was again provided through the State Department of Markets and the United States Department of Agriculture in the principal fruit and vegetable producing areas of the State. The total number of inspections was reduced somewhat as a result of the curtailed production of peaches and apples and less exacting market requirements for these two crops. Nevertheless inspections were made on 1,682 cars of fruit and vegetables for 46 applicants during the season. The inspections covered apples, peaches, pears, potatoes, tomatoes, sweet potatoes, cucumbers and cantaloupes.

The inauguration by the Del-Mar-Va Eastern Shore Association of a department of markets for the purpose of assisting Eastern Shore producers to improve their marketing methods was a progressive step during the year.

Dr. F. B. Bomberger, chief of the State Department of Markets, was secured as director of the new marketing bureau and while his services were lost to the State Department of Markets they were nevertheless still directed to marketing work within the State.

Washington Market a Problem

The Extension Service co-operated during the year with the Prince George's County Pomona Grange, the Farm Bureau and other farmers' organizations interested in the relocation of the Washington Farmers' Market. Considerable time and effort were spent on this project because of its vital importance to the Maryland farmers in the vicinity of the District of Colum-

bia. Various proposed locations were inspected, numerous hearings and meetings were attended and plans were prepared to show the adaptation of the site most favored by farmers as a market location.

The Extension Service likewise co-operated in a number of marketing surveys during the year, inaugurating in co-operation with the United States Department of Agriculture a survey of the Baltimore livestock market.

Home Work Effective

Home demonstration work during the year has been productive of splendid results. There has been a steady increase in enrollment in rural women's clubs as well as in 4-H girls' clubs and there has been a very evident forward step in the development of leaders in rural community work.

The Rural Women's Short Course last June set a new record for attendance with nearly 450 women enrolled. The helpfulness of this annual event and the fine interest displayed in it by the rural women of the State have given it an established place in the home demonstration work in Maryland.

Co-operation with Organizations

The Extension Service has been able to enlist the co-operative help and support of many agencies during the year. It has, of course, co-operated with the Farm Bureau and the State Grange, with the various commodity organizations and with all other agencies looking to the advancement of the State's agriculture. In club work particularly and in such projects as the distribution of good seed corn, the Extension Service has had the support of the Maryland State Bankers' Association. The Tri-State Packers' Association has continued to work with the Extension Service in bringing about improved production of canning crops. There have been opportunities for close co-operation of the Extension Service with the Del-Mar-Va Eastern Shore Association and the Southern Maryland Immigration Commission which have been productive of good results.

From the standpoint of the Extension Service, the year has been one of satisfactory progress with every evidence from

rural people of a growing understanding of the work and a greater appreciation of the service rendered.

Crop Yields of 1927

As a matter of record, the crop yields have been included in the annual report of the Extension Service for the past eight years. These figures are secured from the Bureau of Agricultural Economics, United States Department of Agriculture, and show production, yield and values for the past year with comparable figures for previous years.

Maryland Crop Statistics

Crop and Year	Acres	Production			Farm Value Dec. 1		
		Per Acre	Total	Unit	Per Unit	Total	Value Per Acre
CORN*							
1927-----	515,000	44.0	22,660,000	Bus.	\$. 80	18,128,000	\$35.20
1926-----	554,000	39.8	22,049,000	"	.64	14,111,000	25.47
1925-----	554,000	45.0	24,930,000	"	.70	17,451,000	31.50
WHEAT—							
1927-----	525,000	17.5	9,188,000	"	1.27	11,669,000	22.23
1926-----	520,000	23.0	11,960,000	"	1.30	15,548,000	29.90
1925-----	495,000	21.0	10,395,000	"	1.51	15,696,000	31.71
OATS—							
1927-----	51,000	33.5	1,708,000	"	.54	922,000	18.08
1926-----	52,000	32.8	1,706,000	"	.50	853,000	16.40
1925-----	55,000	32.0	1,760,000	"	.53	933,000	16.96
BARLEY—							
1927-----	9,000	30.5	274,000	"	.87	238,000	26.44
1926-----	10,000	34.3	343,000	"	.80	274,000	27.44
1925-----	12,000	33.0	396,000	"	.87	345,000	28.71
RYE—							
1927-----	14,000	15.3	214,000	"	1.10	235,000	16.79
1926-----	15,000	18.0	270,000	"	1.05	284,000	18.90
1925-----	18,000	19.0	342,000	"	1.14	390,000	21.66
BUCKWHEAT—							
1927-----	8,000	22.0	176,000	"	.93	164,000	20.50
1926-----	8,000	20.2	162,000	"	1.00	162,000	20.20
1925-----	7,000	24.0	168,000	"	1.00	168,000	24.00
POTATOES—(Total crop)							
1927-----	43,000	122.0	5,246,000	"	1.05	5,508,000	128.09
1926-----	39,000	90.0	3,510,000	"	1.40	4,914,000	126.00
1925-----	37,000	73.0	2,701,000	"	1.94	5,240,000	141.62
SWEET POTATOES—							
1927-----	11,000	144.0	1,584,000	"	.70	1,109,000	100.82
1926-----	11,000	165.0	1,815,000	"	.75	1,361,000	123.75
1925-----	9,000	129.0	1,161,000	"	1.70	1,974,000	219.30
HAY—(All tame)							
1927-----	443,000	1.63	724,000	Tons	15.40	11,150,000	25.17
1926-----	396,000	1.30	516,000	"	20.00	10,320,000	26.06
1925-----	416,000	1.39	577,000	"	19.00	10,963,000	26.35
TOBACCO—							
1927-----	32,000	818.00	26,176,000	Lbs.	.190	4,973,000	155.41
1926-----	31,000	840.00	26,040,000	"	.237	6,171,000	199.06
1925-----	30,000	823.00	24,690,000	"	.238	5,876,000	195.87

* The figures shown for corn relate to corn for all purposes, including that hogged and siloed; and that cut without removing ears and fed, as well as that corn husked and snapped for grain; the yield for grain being applied to the total corn acreage to obtain an equivalent production figure for all corn.

Maryland Crop Statistics—Continued

Crop and Year	Acres	Production			Farm Value Dec. 1		
		Per Acre	Total	Unit	Per Unit	Total	Value Per Acre
APPLES—(Total crop)							
1927-----	-----	-----	1,700,000	Bus.	\$1.25	2,125,000	-----
1926-----	-----	-----	3,500,000	"	.50	1,750,000	-----
1925-----	-----	-----	1,900,000	"	1.15	2,185,000	-----
(Commercial crop)							
1927-----	-----	-----	400,000	Bbls.	3.70	1,480,000	-----
1926-----	-----	-----	600,000	"	1.50	900,000	-----
1925-----	-----	-----	324,000	"	3.40	1,102,000	-----
PEACHES—							
1927-----	-----	-----	352,000	Bus.*	1.50	528,000	-----
1926-----	-----	-----	700,000	"	.75	525,000	-----
1925-----	-----	-----	240,000	"	1.85	444,000	-----
PEARS—							
1927-----	-----	-----	193,000	" *	.90	174,000	-----
1926-----	-----	-----	394,000	"	.55	217,000	-----
1925-----	-----	-----	280,000	"	1.00	280,000	-----
GRAPES—							
1927-----	-----	-----	1,224	Tons	50.00	61,000	-----
1926-----	-----	-----	1,330	"	50.00	66,000	-----
1925-----	-----	-----	781	"	72.00	56,000	-----
TOMATOES—(For Mfr.)							
1927-----	34,410	4.4	151,400	"	14.28	2,162,000	\$62.83
1926-----	37,000	2.4	88,800	"	13.90	1,234,000	33.36
1925-----	49,800	5.0	249,000	"	15.97	3,976,000	79.85
SWEET CORN—(For Mfr.)							
1927-----	27,500	1.8	49,500	"	11.78	583,000	21.20
1926-----	33,850	2.2	74,500	"	14.08	1,049,000	30.99
1925-----	42,800	2.7	115,600	"	17.57	2,043,000	47.71
CANTALOUPE—							
1927-----	7,100	125.	888,000	Crts.	2.20	1,954,000	275.21
1926-----	6,120	163.	998,000	"	1.42	1,417,000	231.46
1925-----	5,570	162.	902,000	"	.92	830,000	149.04
STRAWBERRIES—							
1927-----	12,780	2,243	28,666,000	Qts.	.12	3,440,000	269.17
1926-----	10,650	3,200	34,080,000	"	.15	5,112,000	480.00
1925-----	9,100	1,900	17,290,000	"	.16	2,766,000	304.00

* Average price paid the grower during the season.

ADMINISTRATION

There have been no changes in the administrative policy of the Extension Service during the past year although there have been some important changes in organization and in personnel.

In May Dr. F. B. Bomberger, assistant director and specialist in organization and marketing, requested leave of absence to assume direction of the marketing activities of the Del-Mar-Va Eastern Shore Association. It became immediately necessary to secure some one who could take over part of the administrative and supervisory duties which Dr. Bomberger had been carrying since his connection with the Extension Service.

There had been apparent for some time the need for more active and frequent field work with the county agents than the director and assistant director had been able to give owing to the many other duties of their offices. The absence of Dr. Bomberger made this situation more acute and it was decided to appoint Mr. E. I. Oswald, who had served as county agent in Worcester County since 1918, as district agent. Mr. Oswald assumed his new duties in June and with his experience in county agent work and long familiarity with the State soon established himself in his new duties.

The work in marketing, of which Dr. Bomberger had charge, was carried on under Mr. S. B. Shaw, chief inspector in the State Department of Markets, a division of the Service, and Mr. Shaw, in addition to his other duties, directed this work during the year.

A splendid spirit of co-operation exists among all the workers in the Service and relations of the Service to the other divisions of the Institution and the State Department of Public Instruction are most agreeable and satisfactory. No difficulties have arisen between the county agents and vocational teachers and, in fact, the closest co-operation is evident in counties where all forces are working on a common program with splendid results in the development of club and community enterprises.

The attitude of all farm organizations in the State to the work of the Extension Service has been sympathetic and helpful. The cordial relations between the various farm organiza-

tions and the spirit of harmony prevailing are worthy of particular comment and have been factors in the development of constructive work among the rural people of the State. The policy of the Service, as heretofore, has been to aid and encourage organization among farm people in every legitimate manner and county and home demonstration agents have undoubtedly contributed much time and effort to building up and maintaining whatever organizations the people of a community desired.

Fewer changes were made in the county and home demonstration force during the year than in 1926. This has been a gratifying feature and has given greater stability to the work of the year. Where changes have been necessary, new agents have been appointed as soon as qualified men and women have been secured.

The Extension Service is receiving unusual co-operation from the Boards of County Commissioners in the several counties. Even during these times when the demand for reduction in taxes is very insistent small increases have been granted in most of the counties for the support of Extension Work.

Sources of Extension Revenue

During the fiscal year ending June 30, 1927, there were available for Extension Work the following funds: Federal Smith-Lever, \$56,287.11; State Smith-Lever, \$46,287.11; U. S. Department of Agriculture (regular), \$17,400.00; U. S. Department of Agriculture (Clarke-McNary Bill), \$1,500.00; Federal Smith-Lever Supplementary, \$14,676.40; County Demonstration Fund, \$54,428.93; State Funds for General Extension, \$16,308.13; State Horticultural Fund, \$12,205.69; Marketing Extension Fund, \$9,804.94, and \$58,884.00 contributed by the various counties, or a total of \$287,782.31.

During the present fiscal year ending June 30, 1928, there are available: Federal Smith-Lever, \$56,287.11; State Smith-Lever, \$46,287.11; U. S. Department of Agriculture (regular), \$17,400.00; U. S. Department of Agriculture (Clarke-McNary Bill), \$1,860.00; Federal Smith-Lever Supplementary, \$14,676.40; County Demonstration Fund, \$57,500.00; State Fund for

General Extension, \$15,000.00; State Horticultural Fund, \$12,-560.00; Marketing Extension Fund, \$10,000.00; Canning Extension Fund, \$7,500.00; Insect Control Fund, \$7,500.00, and \$60,000.00 contributed by the various counties, or a total of \$306,570.62.

Changes in Personnel

The following changes in personnel have taken place during the year:

Dr. F. B. Bomberger, assistant director of Extension and chief of Maryland State Department of Markets, granted an extended leave of absence beginning May 1, 1927.

Mr. E. I. Oswald transferred June 1, 1927, from county agent in Worcester county to district agent. Succeeded in Worcester county by Mr. R. T. Grant July 1, 1927.

Miss Helen Shelby appointed July 1, 1927, as district home demonstration agent to succeed Mrs. H. V. McKinley, who resigned April 20, 1927.

Mr. H. A. Hunter transferred October 1, 1927, from assistant pathologist to canning crops pathologist.

Mr. J. M. Hoblitzell appointed March 1, 1927, as part time, assistant publicity agent.

Mr. R. S. Brown appointed June 1, 1927, as assistant county agent in Talbot county. Transferred July 1, 1927, to county agent to succeed Mr. E. P. Walls, who resigned June 30, 1927.

Mr. Stanley E. Day appointed March 28, 1927, as county agent in Anne Arundel county to succeed Mr. Jesse M. Huffington, who resigned January 31, 1927.

Mr. Joseph L. McGlone transferred December 16, 1926, from assistant county agent in Frederick county to county agent in Garrett county to succeed Mr. W. C. Jester, who resigned December 31, 1926.

Mr. John B. Morsell appointed December 1, 1926, as assistant county agent in Kent county. Transferred March 1, 1927, to county agent in Calvert county to succeed Mr. S. R. Newell, who resigned October 15, 1926.

Mr. Fred L. Bull resigned December 31, 1926, as assistant county agent in Baltimore county.

Mr. Landon C. Burns appointed September 1, 1927, as county agent in Carroll county to succeed Mr. E. K. Walrath, who resigned August 6, 1927.

Mr. Henry M. Carroll transferred November 1, 1926, from assistant county agent to acting county agent in Harford county; and then made county agent July 1, 1927, to succeed Mr. B. B. Derrick, who resigned October 15, 1926.

Miss Edythe M. Turner appointed January 10, 1927, as county home demonstration agent in Baltimore county to succeed Miss Mary Graham, who resigned December 31, 1926.

Miss Priscilla B. Pancoast transferred February 1, 1927, from assistant county home demonstration agent in Baltimore county to county home demonstration agent in Cecil county to succeed Miss Lillian R. Grimm, who resigned October 15, 1926.

Miss Helen N. Schellinger appointed January 1, 1927, as county home demonstration agent in Kent county to succeed Miss Susan V. Hill, who resigned September 30, 1926.

Miss Margaret Smith resigned June 30, 1927, as county home demonstration agent in Washington. Succeeded July 1, 1927, by the temporary appointment for two months of Miss Alberta F. Coleman. Miss Coleman followed by the temporary appointment October 31, 1927, of Mrs. Lillian R. G. Frazer.

Miss Helen E. Pearson appointed July 1, 1927, as county home demonstration agent in Frederick county to succeed Miss Elizabeth R. Thompson, who resigned June 30, 1927.

Miss Elsie M. Benthien appointed September 1, 1927, as county home demonstration agent in Garrett county to succeed Miss Kathrine Brown, who had resigned August 31, 1927, after a temporary employment of two months, succeeding Miss Lola Belle Green, who resigned June 30, 1927.

Mrs. Leah W. Hopewell resigned August 31, 1927, as local home demonstration agent in Charles and St. Mary's counties.

Mrs. Georgiana Linthicum granted extended leave of absence October 1, 1927.

Mrs. Olive K. Walls granted extended leave of absence September 1, 1927.

Equipment

During the past year no special equipment has been purchased by the Service. There has been necessary the purchase of ordinary office supplies, such as new typewriters to replace old ones and transfer filing cabinets on account of the gratifying growth of the work. If funds will permit during the coming year, it is hoped to realize at least partly the ambition of the Service to purchase some new exhibit charts and models.

Increasing Efficiency of Workers

In an effort to increase still further the efficiency of the workers of the Service, there are held regular, monthly con-



Some of the characters in the mock potato trial, held in connection with the annual tour in Worcester county in 1927.

ferences of the specialists of the Service where all phases of the work are presented and common problems discussed. The group meetings of the agents are a source of much benefit and inspiration to them. Each year there is held at headquarters a conference of all members of the Service.

The physical well-being of the agents is a matter of concern, since the endless demands upon their time, both night and day, make it impossible for them to secure much rest and recreation.

Records of Office Work

With all clerks in one office, a great amount of work is dispatched with a minimum force, and, under the supervision of Miss K. G. Connolly, administrative assistant and chief clerk, a very satisfactory system of records and financial accounts is kept. During the year a total of 11,033 first class letters have been mailed from headquarters, while the total pieces of mail numbered 94,657. In all 164,545 first class letters and pieces of mail were sent out by the Extension Service throughout the State.

It is my desire, in closing the discussion of the administration project, to express my appreciation to all members of the Service for their cordial support and especially for the able assistance of Mr. E. I. Oswald and Miss V. M. Kellar.

PUBLICATIONS

M. D. Bowers, Specialist

Publications issued by the Extension Service during the year have been edited by Mr. M. D. Bowers, specialist in agricultural journalism, who has likewise directed the Information service.

Early in the year an effort was made to link up the information service more closely with the work of the county agents and with that end in view all releases intended for the newspapers of the State were mailed to the county agents for their distribution.

The new system worked out very satisfactorily and has been continued. Up to December 1, 1927, 142 news releases had been issued in this manner. In addition special articles were prepared for farm papers and other publications upon request and special releases were prepared for such projects as the Better Beef Special, the Rural Women's Short Course, Club Week, the Rural Ministers' Short Course, etc.

In co-operation with Mr. Reuben Brigham, of the Extension Service, United States Department of Agriculture, the photographic work in the State was continued, a schedule being planned to the five Southern Maryland counties where photo-

graphs were secured for the use of the Extension Service and the Southern Maryland Immigration Commission.

The specialist also co-operated with the Southern Maryland Immigration Commission in the preparation of an advertising booklet. Regular columns, composed of a summary of the activities of the county agents as covered in their monthly reports, have been continued during the year in the Maryland Farmer and the Southern Planter.

A series of schools on publicity for interested members of rural women's clubs was held during the year in several counties of the State in co-operation with the respective home demonstration agents and the State home demonstration agent. These meetings, while not largely attended, proved interesting and helpful to those directing the publicity work of the rural women's clubs.

The following publications have been issued by the Extension Service during the past year: Bulletin 41, "Loblolly Pine—A Woodland Crop", 52 pages, 3,000 copies; Circular 54 (revised), "Winter Egg Production", 12 pages, 5,000 copies; Circular 60, "Certification of Sweet Potatoes", 8 pages, 2,000 copies; Circular 61, "Brooding and Rearing of Chicks", 12 pages, 5,000 copies; "Recommended Standards for Grading, Packing and Inspection of Maryland Fruits, Vegetables and Eggs", 48 pages, 900 copies; Information Card 15, "Apple Spray Calendar", 2 pages, 3,000 copies; Information Card 16, "Peach Spray Calendar", 2 pages, 3,000 copies; Twelfth Annual Report, 78 pages, 3,000 copies; Extension Service News issued monthly, with 4 pages and 4,000 copies each month.

Projects

The work of the Service is conducted under regular projects by specialists and agents. All projects are planned in advance and approved by the Extension Service, U. S. Department of Agriculture.

COUNTY DEMONSTRATION WORK

E. I. Oswald, District Agent

All the county demonstration work has been conducted under the regular project work by specialists and agents. Projects

have been planned in advance and approved by the Extension Service of the United States Department of Agriculture. It is with considerable pride that the Service can boast of a county agent in each of the twenty-three counties of the State for the past ten years and with an assistant in one of the twenty-three counties.

Home demonstration agents are employed in all of the counties except three, with one assistant home demonstration agent. There are two local colored men agents, one in Southern Maryland and one on the Eastern Shore of Maryland.

The county agents, assisted by the District Agent and the subject matter specialists, have endeavored to plan their project work so as to meet the needs of the State as well as the several counties and the rural communities. Inasmuch as Maryland conditions are widely varied it has been impossible to plan a program that would meet the demands of the entire State.

County Programs of Work

County programs of work have been established by all the county agents working in co-operation with farmer's organizations wherever possible. In the majority of the counties where Farm Bureaus and Granges exist a joint agricultural program has been planned. In other counties where these organizations do not exist the county agents co-operate with a Farmer's Federation built up of community clubs through which they are able to carry on extension work. Still in other counties, agents have been able to conduct comprehensive programs of extension work through the medium of commodity organizations.

One of the outstanding state projects was the wheat smut campaign. It was conducted by practically all the counties of the State through method demonstrations in the various wheat growing communities.

A lime campaign arranged by several of the counties proved of great assistance to farmers in determining the degree of acidity existing in their soils. Thousands of farmers were benefited through the tests made by county agents and advised as to the proper quantity and type of lime to be used.

A seed potato certification project was planned in three of the potato growing counties. This undertaking was unusually

successful and has been the means of encouraging growers to produce high quality certified seed from pedigreed stock. Roguing out diseased plants from seed fields has been a very important factor in seed certification. Through these demonstrations the industry has grown from nothing to a point where 40,000 bushels of certified seed were produced last year. It has also enabled the farmer to market a higher quality product to better advantage.

Dairy projects have been conducted in the majority of the counties in co-operation with the various co-operative dairy organizations. Cow testing associations have been encouraged and dairymen have been assisted in every way possible in the testing of their herds. The Service has co-operated with the Livestock Sanitary Board in the tuberculin testing in practically all of the dairying counties. A dairy special run in co-operation with one of the railroads was very successful and assisted very materially in educating the dairymen in the best dairy practices, also in the purchase of high grade breeding stock. Dairy judging teams were trained by Extension specialists to take part in state, national, and international contests. This activity was chiefly confined to Junior and Boys' Club work.

The beef cattle industry was assisted through the Service by conducting beef feeding demonstrations. The running of a beef special over one of the railroads provided for the purchase of high grade sires. The organizing of a Junior Baby Beef Club in one of the Western Maryland counties was a very important factor in the industry. The beeves fed through the Club were very successfully sold as high grade products to demonstrate the advantage of quality in marketing beef products.

A very successful ram sale was held on the Eastern Shore as a medium of disposing of the pure bred rams grown by adult and junior breeders throughout the State.

Poultry work was emphasized chiefly through the medium of culling and feeding demonstrations and the training of judging teams for entrance into state and national contests. The State plan for certification of baby chicks will no doubt have a very far reaching effect in the poultry industry since it will not only assist breeders to market their day-old chicks to a

better advantage but will protect the poultrymen in the purchase of breeding stock and in holding disease under control.

The spray service conducted during the past season has been of inestimable value to the orchardists. This service provided the county agents with timely information for distribution to the growers throughout the counties. With this information they were advised as to the development of insects and diseases and the proper time to apply the spray.

The hog growers were assisted by the Service co-operating with the Livestock Sanitary Board in the control of hog cholera. Information was provided through community meetings, circular letters, and news items. A 150-day, 1500-pound litter contest was very successfully conducted as a State project and participated in by a number of the counties.

Farm wood lot owners and timber operators were assisted in wood lot management and the reforestation of cut over areas and abandoned lands. This work was chiefly promoted through a medium of forest demonstrations arranged for by the several agents in the counties and conducted in co-operation with the State Forestry Department.

Particular emphasis was placed on canning crops work during last year. The tomato growers and canners were assisted in conducting variety tests and securing high quality seed of approved varieties.

The sweet corn growers as well as the pea growers were also assisted through the medium of local and community demonstrations in the control of insect pests and fungus diseases. The saving of high quality seed was emphasized with all the canning crops.

The marketing of fruit and truck crops was greatly facilitated through the Federal State Inspection Service with which the Extension Service co-operated in every detail. Farmers were shown the importance of marketing high quality products according to standard grades and were educated as to the nature of diseases causing poor quality. County agents assisted in this movement by the holding of community meetings to discuss phases of the Inspection Service program.

Junior work through the boys' and girls' club activities was a very important factor in the Service. Club meetings

were held with local clubs in every county of the State. Demonstrations were conducted by club members in practically all of the projects promoted by adult demonstration work. Junior judging teams were trained and made splendid records in state, national, and international judging contests.

A movement for better seed-corn had its widespread effect on the corn growers. Community exhibits and corn shows were very successfully held in many sections where growers displayed exhibits and were assisted in the selection of their seed corn as well as exhibits for entrance into the state and national contests. Breeders having high grade seed experienced no trouble in disposing of it for seed purposes.

Inasmuch as the five Southern Maryland counties are vitally interested in the growing of tobacco and receive their livelihood chiefly from funds derived from this crop, much attention has been paid by the county agents in these counties to the development of the industry, chiefly with reference to fertilizing the crop so as not only to increase the yield per acre but to improve the quality. This has been achieved chiefly by conducting demonstrations in the principal tobacco growing sections. The marketing of the crop has also received attention from the standpoint of organizing the growers for pooling and selling the crop and also in assisting them to grade the crop more efficiently, with a view to establishing Government standards.

An effort has also been made in several of the Eastern Shore counties by the business men to encourage the growing of tobacco there. The county agents in these counties have therefore been called upon to conduct several tobacco growing demonstrations with particular emphasis on cultural methods and the adaptability of the crop to local soil and climatic conditions.

As a result of efforts made by the Department of Rural Engineering and the specialists in farm machinery co-operating with the county agents, a rather outstanding program of permanent farm improvement was conducted in several of the counties during the past season. This work constituted the holding of a series of meetings in different sections of the county to impress upon the minds of the farmers the need of permanent farm improvement. These needs were illustrated with

motion pictures and slides. The day following these meetings was devoted to the holding of pre-arranged demonstrations in the building of water troughs, milk cooling tanks, pavements around the house and farm buildings, well platforms, steps, foundations for both new and old buildings, and septic tanks. As a result of these demonstrations many farmers were impressed with the ease with which concrete could be mixed and how advisable it is to keep in mind permanency in the making of farm improvements. Many much needed improvements were the result of this campaign.

A number of agents have been very successful in conducting a campaign of community improvements through local committees which have assisted in holding regular monthly community meetings, the county agent having charge of the agricultural program and providing suitable motion picture and lantern slides for illustrating extension and community activities. In arranging the programs for these community meetings an effort was made to develop local leadership by having local speakers on the program and in the discussion of matters of particular local interest. The growing of crops was discussed in season. Boys' and girls' club activities also occupied at least one month's program.

Below is given a brief statistical summary of the agents' work:

Number of farm visits made in conducting Extension work.....	15,454
Number of calls on agents for assistance.....	44,668
Number of individual letters written.....	47,071
Number of demonstration meetings held.....	1,473
Number of people who attended demonstration meetings.....	29,475
Number of other co-operative educational meetings held.....	1,736
Number in attendance at these meetings.....	115,448
Number of training meetings held for local leaders.....	42
Number in attendance at these meetings.....	322
Number of Extension Schools and Short Courses held.....	39
Number in attendance at these Extension Schools and Courses.....	2,744

COUNTY DEMONSTRATION AGENTS

The following agents are employed in the respective counties at this date:

County	Name	Headquarters
Allegany.....	R. F. McHENRY.....	Cumberland
Anne Arundel.....	STANLEY E. DAY.....	Annapolis
Baltimore.....	W. C. ROHDE.....	Towson
Calvert.....	JOHN B. MORSELL.....	Prince Frederick
Caroline.....	T. D. HOLDER.....	Denton
Carroll.....	L. C. BURNS.....	Westminster

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County	Name	Headquarters
Cecil.....	T. H. BARTILSON.....	Elkton
Charles.....	GEORGE R. STUNTZ.....	La Plata
Dorchester.....	WM. R. McKNIGHT.....	Cambridge
Frederick.....	H. R. SHOEMAKER.....	Frederick
Garrett.....	JOS. L. MCGLONE.....	Oakland
Harford.....	H. M. CARROLL.....	Bel Air
Howard.....	M. H. FAIRBANK.....	Ellicott City
Kent.....	H. B. DERRICK.....	Chestertown
Montgomery.....	O. W. ANDERSON.....	Rockville
Prince George's.....	W. B. POSEY.....	Upper Marlboro
Queen Anne's.....	E. W. GRUBB.....	Centerville
St. Mary's.....	G. F. WATHEN.....	Loveville
Somerset.....	C. Z. KELLER.....	Princess Anne
Talbot.....	R. S. BROWN.....	Easton
Washington.....	M. D. MOORE.....	Hagerstown
Worcester.....	R. T. GRANT.....	Snow Hill
Wicomico.....	J. P. BROWN.....	Salisbury

Assistant County Agents

Harford.....	W. H. EVANS.....	Bel Air
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Local Agents

Southern Maryland.....	J. F. ARMSTRONG (Col.).....	Seat Pleasant
Eastern Shore.....	L. H. MARTIN (Col.).....	Princess Anne

NEGRO WORK

The progress made in negro work by the Extension Service during the past year has been highly gratifying especially when the fact is considered that only two local agents have been employed, one working in the lower counties of the Eastern Shore of Maryland, and the other in the Southern Maryland counties.

Much interest has been shown in club work. The colored boys in both of these sections have been very active in the handling of pig club projects. A very creditable Boys' and Girls' Club Week was held at Princess Anne in co-operation with the Eastern Branch of the University of Maryland. The attendance was good and a well defined program proved most valuable to those present.

Plans have also been made for holding a rather comprehensive institute in the Southern Maryland district. A special effort has been made by the two local agents to encourage the growing of better corn, and seed corn campaigns have been arranged with the extension agronomist for the coming year. If funds would permit much more excellent work could be done with the 6,000 negro farmers of the State.

HOME DEMONSTRATION WORK

Miss Venia M. Kellar, State Home Demonstration Agent

Progress, growth, and appreciation of the value of home demonstration work among the rural people of Maryland are evident in the record of the past year. Keeping to a few well outlined projects and securing definite results from club members have been of great help in planning county-wide programs. Emphasis the past year has been placed on the importance of home demonstrations, achievement days, county tours, leader training schools, reports and publicity.

The plan of projecting the work has been to encourage farm women and girls, if interested, to carry definite projects through their organizations. This method enables the home demonstration agent to give help to a greater number of people. It has been proven that the best demonstration work is done by working through organized groups. The women not only like the social contacts, but are interested in knowing what other women do. Organization also helps to develop leadership which is greatly needed among farm women. Co-operation has been extended to all organizations in the State interested in women's work.

Projects

Miss Margaret McPheeters, District Agent

Miss Helen Shelby, District Agent

The two major projects the past year were foods and nutrition, textiles and clothing. The objectives in the foods and nutrition project were to interest home-makers in adopting higher standards which will result in better nutrition for their families, to establish an acquaintance with more efficient equipment, and to increase the use in the diet of more vegetables, fruit, and milk. The twenty counties having home demonstration agents co-operated in putting on this project, and reports show 4,057 women enrolled with 3,643 women practicing better food preparation. As a result of the foods and nutrition work the club women are preparing meals with a great deal more interest, both from the standpoint of selecting proper foods and in their preparation.

Textiles and Clothing

The work in this project was popular with all women. The outline for the clothing project was general in nature, covering both construction and selection phases of the subject. Five demonstrations were listed and subject matter was sent to the home demonstration agents to be reorganized or used as seemed most fitting. The demonstrations were as follows:

1. Charting the figure and planning the costume as to line.
2. Neck finishes and planning the costume as to color.
3. Sleeve finishes and planning the costume as a whole.
4. Tailored finishes and textile selection.
5. Children's garments and decorative finishes.

Reports show that 4,276 women were enrolled in the clothing work. The number of local leaders in clothing was 147. Twenty-seven office demonstrations were given to leaders with an attendance of 1,506.

Community Activities

Community activities and interest change from year to year. Such changes are due to leadership and the outgrowth of new interests. The agents, both men and women, work hard to analyze community needs, and then in conference with the leaders plan a program that will be of community interest and bring the people together. The community program helps to bring together all organizations under a common banner of service.

Rural Women's Short Course

The fifth annual Rural Women's Short Course was held June 13 to 18. Five hundred and twenty-five women from 21 counties registered for the course. Twenty-five women were present who had attended the course for five years.

The women attended the course with a real purpose in mind, and the help received through the subject matter demonstrations and lectures has stimulated excellent co-operation and interest in home demonstration work in their respective counties. Instruction was given in foods and nutrition, clothing, household management, house furnishing, millinery, landscape gardening, home dairying, poultry, health, parliamentary law, citizenship and music.

An interesting feature of the course each year is the awarding of certificates to the women who attend the course for four years. The certificates are presented in the name of the University of Maryland by the president, and a special program is held to emphasize the occasion.



Rural Women enjoying games at the fifth annual Rural Women's Short Course at the University of Maryland.

Achievement Days

New features in the home demonstration program the past year were the achievement days. Thirty-three achievement days were held in 13 different counties, with programs planned to mark a certain milestone reached in the clothing and nutrition project.

No one measure in checking results of progress has been as effective as the achievement program. At this time the county project chairmen made reports of the progress and accomplishments of the projects carried on in the county. Exhibits that tell a story of some one phase of the project are staged by individual clubs, and stunts, playlets, and songs by the women all have a part in making up the program.

Girls' Club Work

Miss Dorothy Emerson, Girls' Club Agent

The girls' club work has shown a normal growth and development during the past year with a 13.6% increase in enrollment.

Clothing, canning, room improvement, and nutrition work are the principal subjects included in the girls' programs.

Clothing

The clothing work is centered around the goal of "a better dressed club girl", and includes instruction in selection, construction, and care of clothing. Three clothing exhibits were entered in the exhibition held in connection with the National Boys' and Girls' Club Congress at Chicago, and were awarded prizes. The awards consisted of a first, a second, and a seventh prize. Style shows were held in eight counties, and a State style show was given at the annual State Club Week.

Food Preservation

Food preservation shows a marked increase, the number of clubs and number of jars canned being almost double that of 1926. A canning club exhibit was entered in the National Boys' and Girls' Club Congress at Chicago, and placed first in the Eastern States section of the contest.

Local Leaders

One-third or more of the girls' clubs have local leaders who are trained to direct the club work; this makes it possible for the home demonstration agents to enroll more clubs in extension work.

Camps

Seven counties directed camps for 4-H club girls. The entire work of these camps is carried on by the girls and the programs are so planned as to give new phases of instruction and recreation.

Demonstration Teams

The girls conducted the second annual demonstration team contest this year. There were several splendid demonstrations given and the cup was won for the second time by Allegany County.

News Letters

Club girls in nine counties issued seasonal club news letters in attractive booklet forms.

Summary

- 268 girls attended club week.
- 8 girls attended Camp Vail (all local leaders).
- 2 girls attended National Camp (both local leaders).
- 350 girls attended county camps.
- 2,571 girls enrolled in 1928.
- 146 girls active in club work four or more years.

Home Demonstration Agents

Following is a list of home demonstration agents at present employed by the Extension Service:

County	Name of Agent	Address
Allegany.....	MAUD A. BEAN.....	Cumberland
Anne Arundel.....	MRS. G. LINTHICUM.....	Annapolis
Baltimore.....	EDYTHE TURNER.....	Towson
Calvert.....		Prince Frederick
Caroline.....	BESSIE SPAFFORD.....	Denton
Carroll.....	AGNES SLINDEE.....	Westminster
Cecil.....	PRISCILLA PANCOAST.....	Elkton
Charles.....	ULA FAY.....	La Plata
Dorchester.....	HATTIE BROOKS.....	Cambridge
Frederick.....	HELEN PEARSON.....	Frederick
Harford.....	EVA K. SCHURR.....	Bel Air
Howard.....	VIDA METZGER.....	Ellicott City
Garrett.....	ELSIE M. BENTHIEN.....	Oakland
Kent.....	HELEN SCHELLINGER.....	Chestertown
Montgomery.....	BLANCHE CORWIN.....	Rockville
Prince George's.....	ETHEL REGAN.....	Hyattsville
Queen Anne's.....		Centerville
St. Mary's.....	ETHEL JOY.....	Leonardtown
Somerset.....		Princess Anne
Talbot.....	MRS. OLIVE K. WALLS.....	Easton
Washington.....	ARDATH MARTIN.....	Hagerstown.
Wicomico.....	FLORENCE MASON.....	Salisbury
Worcester.....	LUCY WALTER.....	Snow Hill

Assistant Home Demonstration Agent

Frederick-----KATHERINE BAKER-----Frederick

Following is a summary of home demonstration work for the year, as reported by the county home demonstration agents:

Number of home visits made in conducting Extension work-----	4,342
Number of calls on agents for assistance-----	15,067
Number of individual letters written-----	22,817
Number of demonstration meetings held-----	3,216
Number of people attending demonstration meetings-----	46,207
Number of other co-operative educational meetings held-----	1,423
Number in attendance at these meetings-----	83,230
Number of training meetings held for local leaders-----	447
Number in attendance at these meetings-----	6,174
Number of Extension Schools and short courses held-----	16
Number in attendance at these Extension schools and courses-----	952

4-H BOYS' CLUB WORK

E. G. Jenkins, State Boys' Club Agent

Progress continues in 4-H Club work. Interest has increased among boys and girls; confidence in the movement as a means of assisting in solving farm problems has grown; newspapers have been most generous in reporting club activities; ample awards have been given for meritorious work in nearly every county; the Timonium Fair, the Maryland State Bankers' Association, the B. & O. Railroad and others have supported the work liberally; and best of all, 4-H club members have improved their practices, "made their best better," increased in ownership, received knowledge and inspiration and vision.

Because of its maturing place in the interest of the public and notwithstanding the competition it finds in adult projects demanding the time and attention of its paid leaders, Maryland club work has held its own, indeed increased slightly over last year. Total enrollment was 2290 as compared with 2211 in 1926.

The State boys' club agent has made a total of 100 days of contacts with the twenty-three agents and one assistant during the year, in which club problems have been discussed. On many other occasions he has met and discussed the work with nearly all agents at exhibits, fairs, conferences, and other events not counted in the above total, making about 96 supervisory "contacts". Methods of conducting clubs, teaching

subject matter, leading inspirational affairs, games and the like have been recorded 118 times but such demonstrations were often made incidental to other affairs and not so reported. In all 54½ days were spent in a supervisory capacity with county agents, 55 club meetings were attended and 247 demonstrations visited.

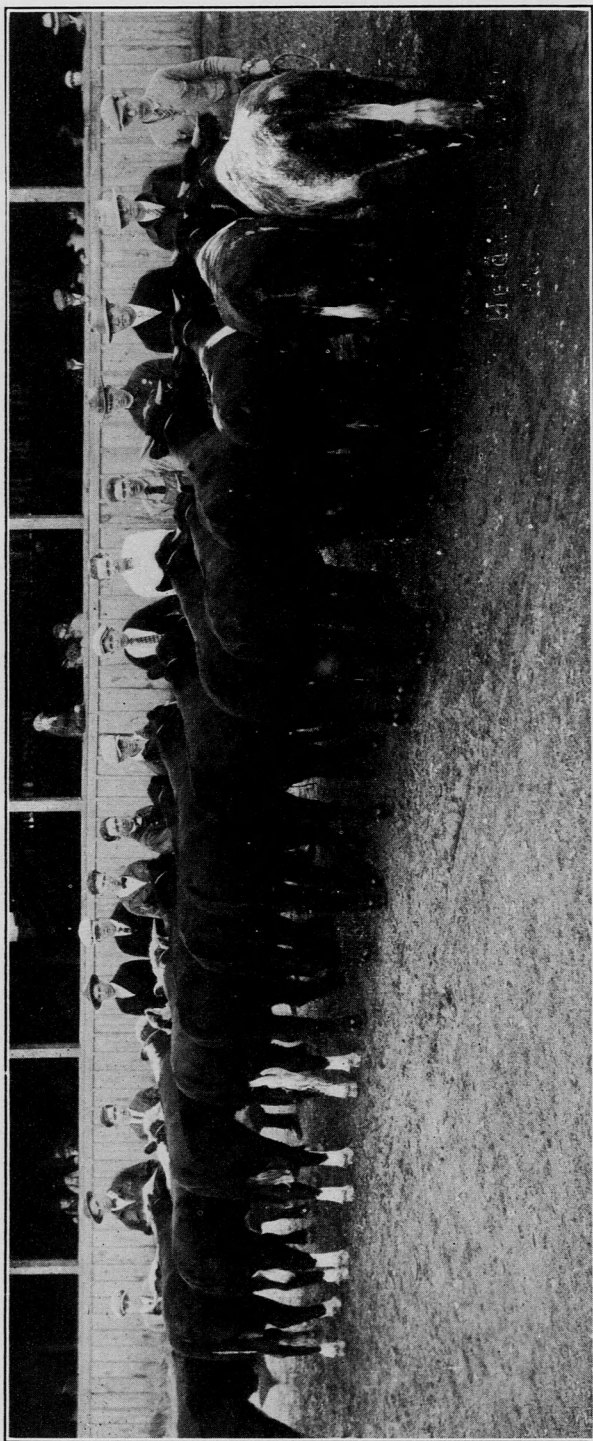
In addition the plans, rules and programs for Club Week, Timonium Fair, Camp Vail, National Dairy Exposition, Negro camp, State and National poultry contests and other contests and affairs have been planned and promoted.

It is noticeable that the enrollment in all crops work except tobacco steadily decreases, while enrollment in livestock and poultry continues to increase.

Swine demonstrations increased over fifty per cent., probably due to economic causes. Complete reports will show a large increase in the number of animals owned since several club members have greatly enlarged their herds. Elwood Anderson probably leads. He went into partnership with his father, taking full charge of the swine on the home farm and closes the year with a herd of 19.

Enrollment in dairy clubs increased nearly twenty-five per cent. and clubs were started in several counties for the first time. Improvement in selection, care and feeding of farm cattle as a result of club instruction is reported in many communities. Doubtless the economic gains from this club activity are greater than any other thing we are doing. It is observed that very many club members in this demonstration continue with other demonstrations such as corn, swine and poultry. It accomplishes one of the great aims of the movement; willingness to adopt better practices in all phases of farming.

Poultry club work, which a few years ago was negligible, now leads all other phases in enrollment. It is interesting to note this development. Dairy and swine club membership was doubtless increased by the rich awards offered at fairs. Poultry club work has had little such encouragement, yet it numbers five members for every eight members in both the other projects. Standards are improving and the influence of this project is seen in many communities. The finest flocks in many localities are owned by club members. Many of these



Washington county 4-H club members and their baby beeves, raised to demonstrate improved methods of production.

boys and girls with the aid of the specialist have purchased well bred cockerels from the Government Farm at Beltsville and from successful breeders. At poultry shows judges often point to a club pen and declare it to be the best in the show. Scores of these members have been actively engaged in poultry judging this year.

The first beef club in the State was organized by the animal husbandry specialist, K. A. Clark, and County Agent Moore at Clearspring. Fifteen excellent calves were brought in and well fed by a carefully selected group of boys and girls. These cattle were shown at Hagerstown Fair where large prizes were awarded. They were sold at auction for fancy prices and the winner, Page Smith, was given a trip to the International by a local service club. This has stimulated a demand for such clubs in other counties. Already a carload of calves has been brought in from Iowa for another club in the same county, most of the former members continuing in the work.

Tobacco leads all other phases of crops work. Boys made good money with this crop and they are coming to understand that improved methods advised by county agents and specialists will greatly increase their profits. While tobacco is grown only in Southern Maryland we find that 136 boys have promoted this work in 1927.

While corn club work has decreased and only fifty boys are enrolled, the work of these boys, and boys in other projects as well, in selecting and testing seed has been most valuable. Four members exhibited in club classes at the International in Chicago and won seventh, eighth and tenth places. Much help has been given to vocational school boys by the experiment station officials, specialists and county agents this year and this is not reported as a club activity.

Inspirational and Educational Affairs

Club Week. Every one declared the 1927 Club Week was the best ever. There were 476 regularly enrolled visitors. Trips were arranged for boys and girls in the agricultural phases to Arlington farm for study of crops, Beltsville farm for study of animals and poultry and to the farm of Mr. Oliver Metzertott for a forestry demonstration. Poultry and dairy

classes were especially well attended. The bankers' trip to Washington was featured by an inspiring talk on Keeping Fit by Walter (Barney) Johnson the great baseball pitcher.

Perhaps the outstanding feature of Club Week was the number of older boys and girls who were present and who carried on about all of the inspirational affairs.

Timonium Fair. Three large tents were erected for club cattle and a commodious tent for boys, at one end of the fair grounds and 4-H club members made their finest calf club exhibit this year. Ninety-seven club animals were shown and the quality of the stock, care and fitting, were evidenced by the placings some of these cattle made in open classes. Nine counties had club cattle exhibits and twelve counties entered teams in the cattle judging contest, the highest three being, Montgomery, Baltimore and Kent.

Excellent swine were shown by Club members. In the ton litter class two boys from Montgomery and one from Harford competed. Others had started but either through ill fortune or through being eliminated in the Montgomery contest, did not enter the State contest.

Camp Vail. Two hundred frying chickens were sent to Springfield, Massachusetts, for the Maryland Fried Chicken demonstration at the Eastern States Exposition. Four Maryland boys killed, dressed, drew and cut up these chickens, as demonstrations for Maryland 4-H club girls to fry in their public demonstration. Maryland club folks have become famous at that great exposition for their efficiency, courtesy and helpfulness in every enterprise of the 4-H program.

National Dairy Exposition. Maryland had a judging and a demonstration team at this great show in Memphis. Our boys were especially well known for their fine club spirit. This seems to have been an "off year" for us as our team fell below the medals, the second time since we entered this field in 1919.

National Poultry Show. Again the Maryland team failed of first place by only a few points at the Madison Square Garden Show contest. They were first in exhibition classes and won two fine silver cups. In our two encounters Connecticut is the only state which has placed over us in any major poultry event.

State Poultry Exhibit and Judging Contest. It seems to be difficult to get club exhibits to the Hagerstown Fair where the fair board has made it possible to have a State club show by offering awards and passes. Only four counties exhibited. In the judging contest Prince George's County took first place over Montgomery by a small margin. These counties have each a member on the State team, Kent County providing the other member and Montgomery the alternate. This team will contest at the National in January.



Maryland 4-H club boys with Judge Frank I. Duncan, attending the annual Meeting of the Maryland State Bankers' Association at Atlantic City.

National Farm Boys and Girls 4-H Club Camp. William James of Harford County and Austin Miller of Frederick County were the two boys who, on their records as club members, won trips to the great National 4-H Camp in Washington in June. This was one of the most inspiring events of the year.

Co-operation. Again the Maryland State Bankers were generous in their aid of club work especially supporting Club Week, Camp Vail, National Dairy and National Poultry shows. A number of banks have been very active and helpful in nearly every county in the State.

The B. & O. Railroad again offered awards in poultry club work and have awarded a one hundred dollar scholarship or trip to the leading boy and the leading girl in the counties adjacent to their lines.

Montgomery Ward and Company offered a trip to the National Club Congress to a boy as well as a girl this year. Elwood Anderson by his splendid club record won the trip.

The club work and leadership record of Stanley B. Sutton of Kent County won fourth place in the nation-wide contest promoted by the Farm Journal. This was a great achievement since he was in competition with many hundreds from practically all the states.

Negro Club Work. A survey of colored club work in Southern Maryland showed that some excellent swine demonstrations are going forward. Several very fine litters were being raised and Negro club members have been selling good purebred stock to both white and colored farmers. One boy has a sow which placed first in a state contest in 1921 which has earned him about \$300 and is still an exceptional individual.

On the Eastern Shore, Negro club work is having a fine effect on entire communities. Perhaps its best results are found in the better sanitary conditions. On one trip 36 swine demonstrations were inspected and only one dirty pen discovered. Most pigs had range provided and the best advised feeding practices were being observed as far as it was possible to do so. Poultry club work is advancing there and many families are cleaning up poultry houses, standardizing flocks and controlling diseases.

In July nearly a hundred club members, twenty-six from Southern Maryland among them, registered at the Negro Club Camp at Princess Anne. Three days of intensive instruction in projects, games and evening events profited these club members greatly.

Negro club exhibits at several community shows have shown great improvement, especially at Princess Anne.

A white-wash campaign among the people of several communities in Wicomico and Somerset Counties was helpful and has started a movement for a campaign in the spring of 1928 of rather large proportions.

Two delegates were sent from the Eastern Shore to the Virginia club camp at Hampton, a profitable enterprise.

AGRONOMY

F. W. Oldenburg, Specialist

Due to the very unfavorable weather conditions during the fall and early winter of 1926, corn failed to mature and dry out properly and there was every indication that good seed corn would be scarce. A survey in Frederick County in January showed that the corn in many cribs was entirely unfit for seed. In a large proportion of other counties corn was of inferior quality and demanded careful attention.

It was found that only corn on farms where husking had been done early and the corn put into narrow cribs, so that drying could take place readily, was in good seed condition. The situation was serious, since most Maryland farmers depend for seed upon the corn selected from their cribs. A Campaign was therefore organized with the following objects in view:

1. To call the attention of the farmers to actual conditions so that they would begin early to select or secure their seed corn.
2. In every county to locate as many cribs of corn fit for seed as possible, and list the extra good ones so that as much as possible could be distributed.
3. To hold demonstration meetings on the proper selection of seed corn.
4. To bring about a more general adoption of better varieties of corn.

The work began in early January in Frederick County, where fifteen farms were visited and several cribs of good seed located. Later, the county agent located several others and directed those who needed a supply to these sources.

Five demonstration meetings were held in the county on seed corn selection with an attendance of 65 farmers.

About the same type of work was carried out in nine other counties during the winter and spring.

In February, eight corn cribs were inspected in Carroll County and several good sources of seed found. Two demonstration meetings were held with 11 present. Ten cribs were visited in Howard County, and six in Caroline County, where ten meetings were held with 168 present.

In March, ten cribs were inspected in Baltimore County, and ten meetings held with 65 present. Nine cribs were inspected in Montgomery County. In Kent County, seven cribs were inspected, and seven meetings held with 180 present.

In April, five cribs were inspected in Worcester County, and two in Calvert County. Six meetings were held in the former county with 120 present, and four meetings in the latter with 85 present.

As a result of these inspections, the agents had sources of seed that they could recommend to their own farmers and to those of other counties. The corn from cribs in Kent and Harford Counties was distributed to a number of other counties. On a whole the demands for seed corn were taken care of very well.

As a result of the field meetings and the publicity, both by the Extension Service and other agricultural interests, seed corn was undoubtedly given a closer inspection than ever before, and on the whole there was less replanting than was expected.

In this campaign 80 cribs were inspected by the county agents and the agronomist, and many more by the county agents alone.

A total of 48 demonstration meetings were held with a total attendance of 736 farmers.

Table Giving Summary of Seed Corn Selection Work

County	No. Meetings	Attendance	Cribs Inspected
1. Frederick.....	5	65	15
2. Caroline.....	10	168	6
3. Carroll.....	2	11	8
4. Howard.....			10
5. Baltimore.....	11	92	10
6. Harford.....	3	65	8
7. Montgomery.....			9
8. Kent.....	7	180	7
9. Worcester.....	6	120	5
10. Calvert.....	4	35	2
Total.....	48	736	80

In November the following visits were made to corn demonstrators, to inspect their corn, demonstrating how to select the best seed and to build up the best show samples for the State Corn Show and the International Grain and Hay Show:

Montgomery County.....	6
Howard County.....	2
Cecil County.....	5
Kent County.....	18
Frederick County.....	6
Harford County.....	4
Carroll County.....	4
Total.....	45

In addition four demonstration meetings were held in Harford and Frederick Counties.

There were 64 exhibits of corn from Maryland this year at the International. Thirteen prizes were won by the 22 yellow ten-ear exhibits. Six of the thirteen ten-ear white exhibits won prizes, and three of the four exhibits in the Junior class. Only one single ear of the 25 entered won a place. Three prizes were won by soybean exhibitors, including a first place.

At most of the 18 fairs and community shows judged, opportunity was given to give a demonstration on seed corn selection and proper selection of a show sample.

Control of Stinking Smut

(In co-operation with Dr. Jehle and Mr. Hunter)

Stinking smut has become a very serious problem for most Maryland wheat growers. The number of fields infected

and the severity of the attack has doubled each year for the last three years. In 1926, more than twenty-eight per cent. of the wheat fields had one per cent. or more of the plants destroyed by this disease. Fall weather conditions were very favorable for the disease and pathologists predicted that the 1927 conditions would be worse.

To make certain how severe the outbreak was, a survey, similar to the one made in 1926, was undertaken by Dr. Jehle and the extension agronomist. Nearly 400 fields were visited in 17 counties. It was found that only twenty per cent. of the fields were free from the disease and that sixty-one per cent. had more than one per cent. and nineteen per cent. a trace.

What Was Done

1. Result of the survey was tabulated and sent to county agents and others so that preparations could be made early for any necessary campaign.

2. Circular letters prepared, giving necessary information to county agents and others in regard to kinds of Copper Carbonate dust, the kind recommended for Maryland, sources of supply, etc.

3. Mimeo No. 1 prepared, giving directions for making a home-made dusting machine. Made three sample machines.

4. Collected information in regard to commercial machines and transmitted it to the county agents.

5. Prepared a poster.

6. Held the following field meetings:

By county agents with the extension agronomist.....	60
(With an attendance of 3,963)	
By county agents with Dr. Jehle or Mr. Hunter.....	23
By county agents alone.....	85
Total field meetings.....	168

7. In addition a sample dust treating machine was shown at the State Fair and 14 other fairs. The county agents and the specialist wrote a total of 152 articles for the press, a radio talk was given on this subject, 13,300 copies of smut literature distributed, including about 5,000 of Mimeos No. 1.

8. A total of 439 home-made machines are reported in the State and 14 commercial machines.

9. As a result 203,533 bushels of seed wheat was treated with copper carbonate, four times as much as the year before.

A total of 28,986 pounds of dust was used.

Assuming that the treatment will be effective and that if the seed had not been treated the smut damage in 1928 would have been only as much as in 1927, it is estimated that the farmers' benefit was about half a million dollars as the result of this campaign.

Hay and Pasture Work

A week's campaign in Kent County during the first week of August was devoted to hay and pasture work. Three field meetings were held and a county-wide meeting.

Ten feed and legume schools were held in Dorchester County during the spring, with a total attendance of 208.

Miscellaneous

1. Tobacco grading work with Mr. Morrow of the Department. Spent week at the Maryland State Warehouse.
2. A series of meetings with colored farmers in Southern Maryland and on the Eastern Shore.
3. Farm crops were judged at 18 fairs.

ANIMAL HUSBANDRY

K. A. Clark, Specialist

The Extension Animal Husbandry projects for the year 1927 were featured by production and marketing projects in all kinds of livestock and meats, special attention being given to sheep and beef cattle projects. The specialist was assisted during the year by Dr. DeVoe Meade, Professor B. E. Carmichael and Professor W. E. Hunt, all of the Animal Husbandry Department.

The first beef calf club in Maryland was organized with fifteen members and fifteen calves in Washington County. At the end of the project, these calves were sold at auction for an average price of \$20.58 per cwt. For the coming year the club has already been organized and extended to include two counties with 59 calves in the hands of the members.

In co-operation with the B. & O. Railroad, the U. S. Department of Agriculture and other agencies a special beef train was run through Maryland, stopping at six points. Two pure-bred beef bulls were sold. About 2,000 people visited the train.

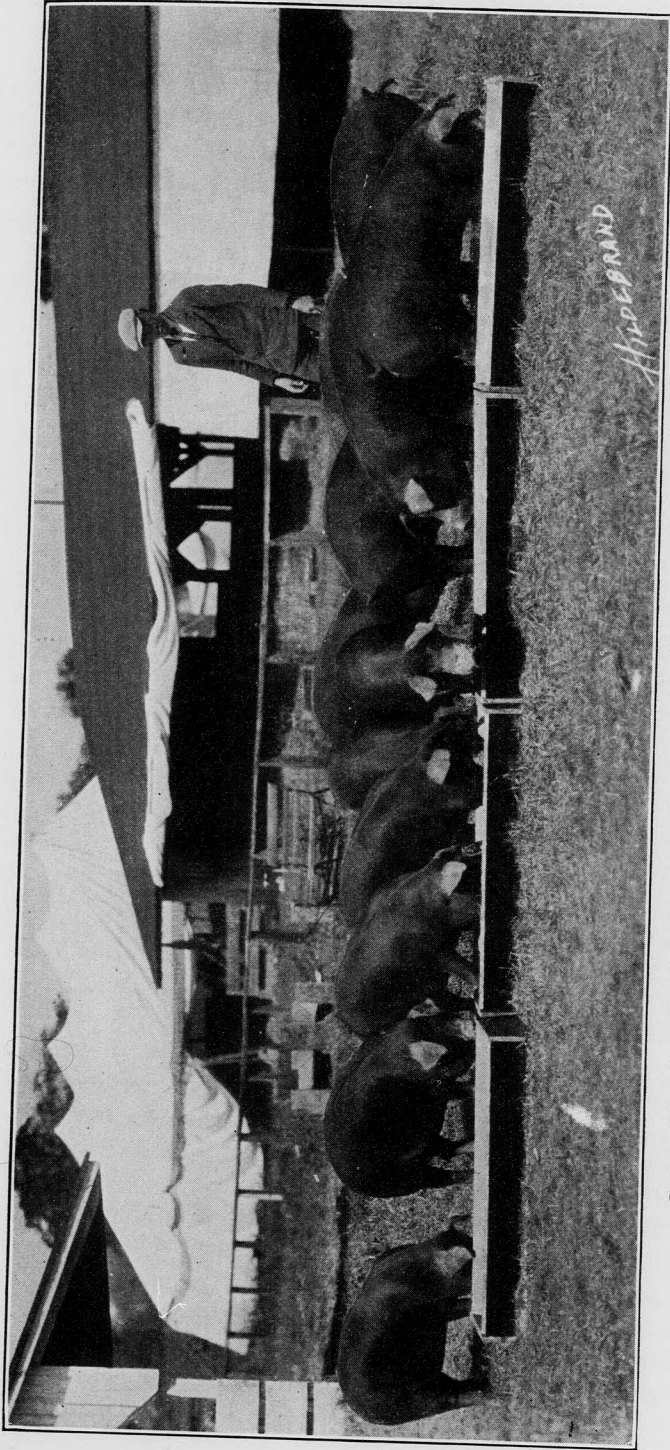
The specialist served as secretary-treasurer of the Maryland Sheep Growers' Association and assisted in conducting two purebred ram sales, selling 39 rams for an average of \$35.36 each. In addition to these, about 45 additional rams and 50 purebred ewes were placed in flocks. The association sends a monthly news letter to its membership. A lamb improvement campaign was conducted throughout the State, partly financed by the Association. This work, embracing 48 docking and castrating demonstrations, handling about 1,200 lambs, extended throughout 19 counties. Several stomach worm-control demonstrations were held, the necessary packages of medicine being handled through the Association. A headquarters tent for sheepmen and hog men was maintained at the Timonium Fair with the specialist in charge. Two trophies offered by the Association for Maryland exhibits in Shropshires and Hampshires at the Timonium Fair were won by Mr. H. G. Hutton and Mr. William Hines, both of Montgomery County, for these two breeds respectively.

In the 1927 Maryland Litter Contest, ten entries were received from four counties. Four litters finished and attained the required weight. The litter of ten Duroc Jerseys entered by Mr. George Carlton Oland attained a weight of 2,093 pounds giving him the trophy offered by the Maryland Swine Growers' Association for the second consecutive year. Mr. Joseph Hornberger Jr. won the trophy offered by the Maryland Swine Growers' Association for the best exhibit of five fat barrows at the Timonium Fair. They were Duroc Jerseys.

The first horse-pulling contest ever conducted in Maryland was held at College Park on May 14. Four teams were entered. The team owned by the W. A. Pierce Lumber Company, of Washington, D. C., took first place, registering a drawbar pull of 2,150 pounds and was awarded the trophy offered by the Livestock Club at the University.

Much improvement is seen in livestock exhibits at fairs as a result of increased premiums and improved classifications. The specialist was called upon to judge at several fairs and community shows.

The outlook for animal husbandry in Maryland is favorable. The strenuous labor situation makes unlimited tilling of the soil a very difficult problem. It is believed that considerable



George Oland, of Montgomery county, and his prize winning fifteen-hundred pound litter.

areas now cultivated or entirely idle could be profitably used for grazing purposes. The balance of meat production and consumption in this area is extremely favorable for producers. Greater profits depend on improved feeding and management methods, breeding practices and construction of livestock enterprises into economical units.

DAIRY HUSBANDRY

J. A. Conover, Specialist

There has been more interest manifested in the dairy industry the past year than for many years prior.

The uniformly high prices for milk in the three leading markets supplied by Maryland shippers have resulted in an increased production, and a desire of many to go into the business. There is a surplus of milk on most markets with warnings from the marketing associations to avoid over-production.

Approximately twenty millions of dollars worth of milk has been marketed by the Maryland dairymen the past year. This means \$3.14 per acre for every acre of land in the State. There has been a substantial increase in milk shipped from Princess Anne, the station which was opened last year. There is now a strong movement on foot for a receiving station in Worcester County and expectations are that it will be established in the near future.

Garrett County has been working hard during the past year to secure a receiving station for that county. The Chestnut Farms Dairy of Washington, D. C., became interested in the project and it is hoped that a receiving station will be established in the county some time during 1928.

There have also been developments in the dairy industry in Anne Arundel County. Co-operative arrangements have been entered into between the dairymen of that county and the Maryland State Dairymen's Association.

The tuberculosis eradication work is rapidly going forward, especially on the Eastern Shore. A large number of reactors are being sent to market. This is creating a demand for dairy cows that will have to be met from sources outside the State. This work is also creating a demand for purebred bulls. The tuberculosis eradication work is always followed by an improvement in the breeding and handling of dairy cattle so that

we may expect the industry to develop along more progressive lines in those sections that have been or are being tested.

The Dairy Extension work during the year 1927 has been conducted along the following lines:

1. Boys' and Girls' club work, especially that part relating to dairy projects.
2. Herd Improvement Association Work.
3. Encouraging the use of better sires.
4. Better feeding of dairy cattle.
5. Dairy barn and dairy house construction and the remodeling of old barns.
6. Fairs and fair exhibits.
7. Miscellaneous.

Calf Club Work

The year 1927 has shown some increase in interest taken in calf club work. The enrollment is 467 which is 44 more than 1926. Cecil, Dorchester and Queen Anne Counties each organized calf clubs, making a total of 18 counties.

Improvement was noticed in the quality of club cattle shown at Timonium. Nine counties exhibited a total of 97 club cattle and twelve counties sent judging teams.

The judging contest went off with promptness and dispatch. Mr. Granville Hibberd, superintendent of cattle at Timonium, again furnished money to pay the holders. This was of great assistance in getting the cattle into the ring as well as making the contest more interesting to the participants.

Montgomery County carried off first honors followed by Baltimore and Harford. The National Judging Team was made up of Roger Kelly of Baltimore County, Cullum Barnsley and John Stiles of Montgomery County.

Forty-one days were spent in the field on calf club work.

Herd Improvement Associations

Eight associations have been running throughout the year. These have been in charge of good testers and very satisfactory results have been obtained. The most interest has been taken by members in the Carroll and Anne Arundel County Associations. Members of these two associations have met four times during the year to talk over their records and discuss the problems that have come up in feeding and herd management. Annual meetings have been held in the other associations for the purpose of transacting business and considering reports of year's work.

The following associations have completed the year's work with average productions as follows:

County	No. of Cows	Pounds Milk	Pounds Butterfat
Allegany.....	358	6449	245
Baltimore.....	244	6903	301
Carroll.....	450	7803	304.6
Harford.....	722	6197	281

No better proof of the benefit of an improvement association could be found than that shown by the first year's records as compared to the past year's reports. The tabulations follow:

County	No. of Cows	Pounds Milk	Pounds Butterfat
Allegany 1920.....	279	5450	221
Allegany 1926.....	358	6449	274
Baltimore 1911.....	282	4498	204
Baltimore 1927.....	247	6902	301
Harford 1912.....	478	4780	235
Harford 1926.....	722	6197	281
Frederick 1918.....	207	6856	253
Frederick 1926.....	213	7368	282
Carroll 1915.....	284	5538	227
Carroll 1927.....	450	7803	304.6
Talbot 1915.....	174	4505	198
Talbot 1925.....	190	6873	277

In those counties where Herd Improvement Associations have been running for a number of years the average production of the cows in the county has been increased. This, of course, is not entirely due to the work of the association, but such work stimulated a desire on the part of many to know what their cows were doing and to improve their herds.

Some three years ago there was started in Baltimore County, a Herd Improvement Club with some 15 members. This has grown until there are about 40 members, and its influence has spread to Cecil County. In the conduct of this club, members weigh their own milk three times a month and take samples for testing once in two months. These samples are sent to a control place for testing. One of the requirements on entering this club is that the member shall estimate the yearly production of each one of his cows before weighing any of the milk. This was for the purpose of showing to the member that he could not tell how much one of his cows would give in a year by looking at her. Abundant proof of this has been obtained.

Not only has this work benefited the farmer by showing him the production of his herd, but it has been the means of introducing purebred bulls and of improving both the feeding and breeding operations, as well as ridding the herds of unprofitable cows.

In the past year and a half 31 purebred bulls have been placed in the herds making up this improvement club.

Furthermore, it has introduced the Extension Service to groups of farmers never before reached and has been the means of carrying on other phases of extension work.

While the work has taken much of the county agent's time, it has not required more of his time than any other worthwhile piece of work and has been of inestimable value to the dairymen and breeders in the county.

Better Sires

The most potent factor in the introduction of purebred dairy bulls in Maryland has been the tuberculin test. The attitude of the Government and State in not paying for any reacting scrub or grade bulls or bulls without registration papers, has meant that a purebred bull has, or will take the place of every such reactor.

The B. & O. Railroad represented by Mr. O. K. Quivey, Agricultural Agent, ran another better sire special over its lines.

The Extension Service has been instrumental in placing many dairy bulls during the past year. How many others were placed by the breeders of the State, there is no way of knowing.

Feeds and Feeding

Interest in better feeding of dairy cattle has been manifest by the holding of feed schools in the following counties: Howard, Kent, Caroline, Dorchester, Somerset, Worcester, and Garrett. For the most part these schools have been well attended.

Subjects receiving special attention during the year have been:

- (a) The dairy cow as a market for feed.
- (b) Kinds and value of different feeds.
- (c) Home grown feeds.
- (d) Combining feeds for best results.
- (e) Figuring the cost.

As a rule five meetings were held in one place. In addition

to the feed schools a number of meetings were held at which a general discussion of the feeding problems was given.

A pamphlet was issued suggesting different grain mixtures suitable to feed with the roughages grown on the farm.

Building Work

There has been considerable activity in barn and dairy house construction, particularly in Prince George's, Anne Arundel and Garrett Counties. This work is still going on and will be one of the major lines of activity during the coming year.

If the present plans of establishing a receiving station in Garrett County are carried out there will be a big demand for assistance in remodeling old barns and planning new ones.

During the past year there has been considerable interest in the building of silos, many of which have been of solid concrete or concrete block construction.

The Extension Service rendered assistance in building and remodeling 67 barns and 25 silos.

Exhibits

A comprehensive dairy exhibit was put on at the Timonium Fair during the year. This embraced the economical feeding of dairy cows, the value of keeping records, the care and handling of milk on the farm, the marketing of milk, and its value to the consumer. This exhibit required 316 square feet of wall space and occupied 440 square feet of floor space.

In addition assistance was given in the dairy and livestock exhibits at the Cambridge, White Hall and Garrett County fairs.

The Tenth Annual Meeting

Maryland State Dairymen's Association

The following statement by Mr. I. W. Heaps, Secretary of the Maryland State Dairymen's Association, at the tenth annual meeting of the organization gives a summary of the history and development of this splendid organization.

"The occasion of the Tenth Annual Meeting of any organization is a time when its members might well pause—pause to recall some of the causes and happenings that led to the founding of the organization—pause to review some of the history

of the organization since its founding—and pause to renew allegiance to the principles and ideals upon which the organization is built. We are presenting to our members in this program of our tenth anniversary some scattering bits of the Association's history. We are doing this primarily to refresh the memories of those who have been with us from the beginning, and to bring to the newer members a sketch of these earlier events with which they have not previously had the opportunity to become acquainted.

"The earliest efforts, of which there are authentic records, to unite the dairymen of Maryland into an association were made on December 15, 1908, when a preliminary organization meeting was held in Donovan McCoy Hall, Johns Hopkins University, Baltimore. At this meeting a committee was appointed to draft a constitution and by-laws. This the committee did, and their work was approved at a meeting on March 17, 1909. Then followed the necessary steps to secure certification of the new organization by the State of Maryland. This was finally accomplished and the Maryland State Dairymen's Association, Inc., was legally authorized to begin operations June 10, 1909.

"It was not until 1918, however, that the present co-operative marketing set-up, which we now know as the Maryland State Dairymen's Association, was developed. On July 20, of that year a committee was appointed to frame a 'tentative plan for the reorganization of the Association, including articles of incorporation and by-laws with forms of agreement, etc.' Also at this time overtures were made to the Maryland and Pennsylvania Milk Producers' Association, a bargaining organization which had grown up in the meantime, to join into one producers' group to engage in the marketing of its members' product.

"The recommendations of this committee were adopted by the members in the annual meeting held August 23, 1918. The original certificate of incorporation was retained and the by-laws, contracts, etc., in force today, were approved. This meeting was the Twelfth General (Annual) Meeting of the old organization and became the First Annual Meeting of the Maryland State Dairymen's Association, Inc., as reorganized. That day marks the beginning of co-operative marketing of milk in the Baltimore territory."

Below is printed the original certificate of incorporation.

- "THIS IS TO CERTIFY That the subscribers, Samuel M. Shoemaker, of Baltimore County, Maryland; Henry M. McCullough, of Cecil County, Maryland; J. Alexis Shriver, of Harford County, Maryland; John Thomas, of Montgomery County, Maryland; Asa B. Gardiner, Jr., of Baltimore City, Maryland, and A. W. Nicodemus, Jr., of Frederick County, Maryland, all of whom are citizens of the State of Maryland, all being of full age,
- "DO HEREBY CERTIFY that we do under and by virtue of the General Laws of this State authorizing the formation of corporations, associate ourselves with the purpose of forming a corporation.
- "1. THE NAME of the Corporation is 'The Maryland Dairymen's Association, Incorporated'.
- "2. THE PURPOSE for which the said corporation is formed and the business or objects to be carried on and promoted by it are to promote and protect the dairy interests of the State of Maryland, and that the said Corporation is formed upon the articles, conditions and provisions herein expressed, and subject in all particulars to limitations relating to corporations which are contained in the general laws of this State.
- "3. THE PRINCIPAL OFFICE of the said corporation will be located in Baltimore City, Maryland.
- "4. THE CORPORATION shall have six directors and that Samuel M. Shoemaker, Augustus W. Nicodemus, Jr., J. Alexis Shriver, John Thomas, Henry M. McCullough, and Asa B. Gardiner, Jr., all of whom are citizens of the State of Maryland and actually reside therein, shall act as such for the first year or until their successors are duly chosen and qualified.
- "IN WITNESS WHEREOF we have hereto set our hands this seventeenth day of March, in the year 1909.

(Signatures)

Samuel M. Shoemaker,
Henry M. McCullough,
J. Alexis Shriver,
John Thomas,
A. W. Nicodemus, Jr.,
Asa B. Gardiner, Jr.

Mark O. Shriver, Jr.
Test:

"Official Recognition by the State of Maryland and Authorization to do Business.

OFFICE OF THE STATE TAX COMMISSIONER,

Annapolis, Md., June 10, 1909.

"Dear Sir—

We beg to acknowledge the receipt of the certificate of incorporation of the Maryland State Dairymen's Association, Inc., which was this day placed upon record in this office. You are authorized to do business from this date.

Yours Respectfully,
Buchanan Schley,
State Tax Commissioner."

The President of the organization, Mr. R. Smith Snader, in his address before the tenth annual meeting of the Association said:

"Your organization has proceeded along lines always progressive; and, at the same time, conservative—conservative in that it still refuses to plunge into new and untried fields without careful consideration and preparation. We have felt that only by adhering strictly to constructive policies can any co-operative enterprise hope to achieve real and lasting success. This attitude, perhaps, more than any one thing, is gradually winning for the association stronger support from its members, and from the general public. In short, we are beginning to realize more fully our responsibilities to each other, as members of one great enterprise. We also recognize, as an association, our responsibilities to all other co-operative marketing and buying associations throughout the length and breadth of the land. They have many things in common. The misfortune of one has its sympathetic reaction in all the others. Likewise the success of one carries encouragement and hope to all the others.

"More than this, we recognize our great responsibilities as a big service organization to the general public, especially the consuming public. Our purpose is not to fix the price of the commodity which we have to sell, but so to work out the problems of distribution and marketing that the farmer will get a fair price for his milk, and the consumer will get all the benefits of uniform quality and service that orderly marketing can provide.

"In the history of mankind are certain milestones that denote the time and place where humanity, as a whole, took a forward step towards better living conditions—sometimes toward better understanding of spiritual conditions, sometimes toward economic conditions that vitally affect us. Such a forward step toward better economic conditions is now being taken throughout this entire land in the co-operative marketing movement. We have been leaders from the start, and we shall never falter.

"Properly developed, carefully conducted and conservatively led, this organization is destined to bring about a greater prosperity to our dairymen without additional expense to others, and will create wider markets for our product, and establish for all time a basis of similar endeavor in orderly marketing."

We are proud of the success of this State Dairymen's organization. From the beginning the extension forces, both agents

and specialists, have done everything in their power to aid and assist the officers and members in their many problems.

During the early years, particularly during the war period, we conducted a cost survey that was most useful in setting forth the cost of producing milk for the benefit of the food administrator.

Dr. A. F. Woods, former president of the University, was always in close touch with the officers of this association and together we all feel much pride in the success of this co-operative.

It may be pointed out that the association has had unusually capable officers and directorate. Too much credit cannot be given to Secretary I. W. Heaps for the notable manner in which he has managed the affairs of the association.

POULTRY HUSBANDRY

W. H. Rice, Specialist

The aim of the poultry extension work during 1927 has been to advance better practices in economical production and marketing.

Considerable emphasis has been placed on brooding and rearing practices, designed to combat, through prevention methods, high mortality and low vitality of Maryland chicks resulting from disease and parasites. Similar work with the turkey raisers of the State has been conducted with marked success during the year.

The 4-H club judging work and poultry certification work, conducted co-operatively with the Maryland State Poultry Association, have been outstanding features.

Brooding Work

To combat the problem of an estimated State mortality average of thirty per cent., this sub-project has gone through its first year's work with very encouraging results. The use of clean chicks, early hatched from disease-free stock, balanced rations and fresh ground were the chief practices emphasized.

Thirty-eight result demonstrations, involving over 50,000 chicks with an average mortality of approximately nineteen per cent., were the fruits of the first year's work. One demonstrator, a splendid co-operator brooding 12,500 chicks, reported a mortality of only 3.2 per cent.

Turkey Production

A mortality of fifty per cent. is not uncommon with Maryland turkey raisers.

Eight result demonstrations, involving approximately fifteen hundred birds, showed an average mortality of less than thirty per cent. Early hatching, artificial incubation and brooding, balanced rations and fresh ground were the practices given principal emphasis.



More than five hundred people attended a striking field meeting on the farm of Mr. and Mrs. H. M. Baker, Kent county, to observe new methods of turkey production.

One demonstrator, thoroughly converted, had a mortality of seven per cent. from disease in the demonstration flock as against a forty-five per cent. mortality from Blackhead in a flock raised on the same farm brooded by hens running on contaminated ground with other poultry.

One co-operator, following a program of practices similar to that recommended, raised over one thousand birds from forty hens and four toms with a mortality of ten per cent. during the year.

Six hundred and fifty people from Maryland, Pennsylvania and Delaware attended an Extension field meeting on this farm on October 26.

4-H Club Work

The establishment of standard bred flocks and the adoption of better practices, involving the same objects as the adult work, have gone forward during the year. Approximately five hundred junior demonstrators completed the year's work.

The State junior poultry judging contest was held in connection with the Hagerstown Fair in October, 1926, eight counties being represented. The team selected at the State contest lost first place by twenty points in the National junior poultry judging contest at the Madison Square Garden Poultry Show, New York, in January, 1927. The team placed first in judging standard classes and second in production classes, being second to Connecticut in aggregate scores.

Poultry Certification

A project of major importance is that of poultry certification in co-operation with the Maryland State Poultry Association. The Extension Service co-operated in supervising the inspections, records, etc. The project is a self-supporting one, being handled by the State Poultry Association.

June 24th was Poultry Day at College Park and about three hundred poultrymen gathered to formulate the Maryland plan for poultry certification and to inspect the Maryland State egg laying contest.

Mr. H. W. Rickey, former Extension poultry specialist, was appointed as certification inspector, inspecting more than eight thousand birds during October, November and December, approximately six thousand passing the requirements. In addition, approximately two thousand of these birds were given one agglutination test for bacillary white diarrhea. The field work was conducted by the inspector, while the laboratory work was conducted by the Department of Bacteriology and Pathology.

The importance of this work in improving the standards of Maryland poultry and insuring the buyers of baby chicks a sufficient volume of reliable disease-free chicks can hardly be overestimated.

Marketing Work

The marketing work has consisted principally of furnishing reliable information as to market conditions, grades, etc. Ef-

fort to further the use of the U. S. standards for eggs and dressed poultry has been made with some success. The marketing of the various classes of poultry at the seasons of greatest demand and best prices has also been given emphasis.

Other features of poultry husbandry work to which effort has been devoted include summer feeding and culling the laying flocks, house construction, remodeling and yarding, feeding for fall and winter eggs and selection of breeding stock. Professor Roy H. Waite and others of the Poultry Department have assisted in the work during the year.

HORTICULTURE

A. F. Vierheller, Specialist

The program of encouraging the increased production of good quality tree fruits and grapes was continued in the past year's program of work. The work was based upon demonstrations in the use of fertilizers, in soil management, and in pruning the various types of trees, so as to induce production of fruit of high quality and good market size.

The season has been one of decreased yields, due to late spring freezes and wet weather at pollination time, and also to outbreaks of scab, brown rot, and such insects as curculio, peach moth and codling moth, which caused considerable damage to both peaches and apples, in some sections, due to weather and local conditions. These factors seriously affected demonstration work in the horticulture field.

Demonstrations in Use of Fertilizers

The merits of various fertilizers and their effects upon peach and apple trees, as shown in spur growth foliage, new wood growth, and fruitfulness, have been demonstrated, with special emphasis on the beneficial effect of nitrate nitrogen, and the resulting deficiency in growth and fruit yield, where the nitrogen supply is limited. These demonstrations are now in their second and third years and have shown good results.

Demonstrations in Pruning

Pruning demonstrations were held in seventy orchards, during the past year, the treatment being in accordance with the

recommended pruning for the trees, according to their age, type and vigor.

The main object was to show the fallacy of severe pruning, and to demonstrate the fact that pruning has a distinct effect upon tree form and yield and also upon early bearing, size and color of fruit, as found by experiments conducted at the Maryland Experiment Station, and other stations throughout the country. Special consideration was given to such facts as the light pruning of young trees, moderate pruning of peaches and apples, and heavier cutting in older trees, by means of annual thinning out of smaller branches throughout the tree, as opposed to "bulk pruning".

Demonstrations in Pruning and Training Grapes

The pruning and training of grapes was continued, due to the increased plantings of grapes in the State. Pruning young vines in such a way as to bring them into bearing, the third year, and also training of the vines to the Single Stem 4-Cane Kniffin System, were some of the phases considered and demonstrated. The training methods are in accordance with the findings approved by the Maryland Experiment Station, as giving best yields and quality, under Maryland conditions.

Miscellaneous

The various problems of the growers called the specialist on 190 advisory visits to the various orchards. Field meetings, lasting two days were held, in co-operation with the Maryland State Horticultural Society.

Three horticultural schools of two days each, were held in various counties. Fruit and vegetable exhibits at 12 community shows and fairs were judged. Such other activities as demonstrations in orchard management, thinning of fruit, grafting and budding, and co-operation with the entomologists and pathologists in the orchard spray service have been among some other activities of the horticulturist.

VEGETABLE AND LANDSCAPE GARDENING

W. R. Ballard, Specialist

Mr. W. R. Ballard, specialist in charge of vegetable and landscape gardening, reports that most of his attention has been

given to the landscape gardening field. Work with vegetables has been taken care of largely by other specialists. Some time, however, has been devoted to the problem of urging growers of cabbage to make a wider use of "Yellows" resistant strains as this has been found to be one of the most effective means of control of this serious disease. Work relating to development of a source of disease-free stock of stringless beans and to the production of certified potatoes has been continued in co-operation with other specialists.

In the field of ornamental horticulture thirty formal demonstrations have been instituted during the year. These include six farm homes, eight suburban homes, ten schools and six of miscellaneous character. In addition, sixty-three advisory visits were made.

Thirty-nine lectures dealing with landscape subjects were given during the year at which the total attendance was 2,057. Two landscape gardening schools were conducted in co-operation with home demonstration agents in addition to instruction given during the Rural Women's Short Course and the Rural Ministers' Conference.

Mr. Ballard reports that a successful flower growing contest was organized among the women's clubs of Montgomery County, culminating in three district flower shows early in October. He was instrumental in the development of a garden contest and a county school improvement contest as well as assisting in the organization of two flower shows.

Ten issues of "Ornamental Gardening Notes" consisting of timely information along the lines of ornamental horticulture were sent out to all agents and extension workers. The favorable response on the part of recipients indicates that this service was well received.

"That Garden of Roses" was the subject of a talk broadcast over Station WMAL. Eighteen letters asking for bulletins and further information were received as a result of this talk. Material has been contributed to the "Farm Flashes" given over Station WRC as well as assisting in the editing of other similar material.

Mr. Ballard has continued to act as Secretary-Treasurer of the Maryland Vegetable Growers' Association and in this capacity has issued a monthly News Letter to members. He has

officiated as judge at five county fairs, ten community exhibits, six flower shows, and four garden contests. He has distributed approximately 440 bulletins, written 2,000 letters and traveled over 9,000 miles in an official capacity.

CANNING CROPS WORK

L. M. Goodwin, Specialist

There were fair packs of Maryland's leading canned products during the season of 1927, according to Mr. L. M. Goodwin, canning crops specialist, who directed the Extension Service work in this field during the year.

In view of the over-supplies of corn and peas, acreages for these crops were somewhat reduced while the tomato acreage of the State remained at about the same figure as in 1926. The pea crop was unusually large and of exceptional quality, the sweet corn crop was small and poor and the tomato crop proved slightly better than normal. It was a year, however, that was not noticeably profitable either to the canner or the grower.

Outline of the Work

The Extension Service work, directed toward improvement of canning crops production, covered in its main features the production of better tomato plants, the production and saving of high quality tomato seed, the comparison of tomato varieties through field tests, the grading of sweet corn to secure a more uniform maturity, treatment of sweet corn seed with mercuric compounds, the grading of pea seed and tests to determine results from bean seed from various sources.

Seventeen tomato plant beds of commercial size, located in ten of the principal producing counties of the State, were supervised by the specialist as demonstrations in plant growing. These beds produced approximately 4,336,000 plants of good quality which were available for growers early in the season.

Coldframe Plants

The other method of tomato plant production encouraged during the year was by means of the cloth covered coldframe. Five demonstrations of this character were conducted in the

State and all were outstandingly successful. Plants from these demonstration beds were ready for the field from ten days to two weeks earlier than plants raised in open beds on the same farms. Plants from one demonstration bed in Carroll County were set in the field the latter part of May. The plants were fully as early as those shipped in from Georgia and used in the same locality and the setting of fruit was far superior. Yields from the test field ran between $13\frac{1}{2}$ and 16 tons per acre.

One demonstration in the treatment of tomato seed with mercuric compound was conducted. A marked contrast was noted in the larger size and more even stand of plants from the treated seed. The merits of seed treatment will be tested more fully during the coming year.

Seed Production

Considerable delay was encountered in obtaining the necessary acreage for tomato seed production and the quantity of seed finally secured was short of the expected mark. However, approximately 38 acres of the Marglobe variety and $19\frac{1}{2}$ acres of the Tri-State variety were grown for seed purposes during the year. Total production amounted to 1,015 pounds of Marglobe seed and 373.5 pounds of Tri-State seed.

A survey to determine the spread of Fusarium wilt was conducted during the year in co-operation with Dr. J. B. S. Norton, of the University of Maryland Experiment Station. Subsequently a map was prepared showing the distribution of the disease and the approximate degree of infection existing.

Sweet Corn Work

The grading of seed corn was undertaken as a demonstration by several canners during the year and proved highly satisfactory. The graded corn was found to facilitate planting, produced a more even stand and resulted in more uniform maturity.

Three tests to determine the value of treating sweet corn seed with mercuric compounds were conducted. It was impossible to note any difference between the treated and untreated rows in the field and since no yield records were obtained

no satisfactory conclusions could be drawn from the tests.

Suckering demonstrations were conducted in sections of Frederick and Harford Counties where suckering is considered to be beneficial. Slight increases in yield were reported where suckers were removed but in no case was the increase sufficient to justify the cost of the work.

Bean Anthracnose Survey

In connection with the production of stringless beans for canning, surveys and tests were conducted to determine the best sources of seed. Fields of beans in Washington County grown from feed secured in Idaho were inspected by Mr. H. A. Hunter, plant pathologist, and only a trace of anthracnose disease discovered. In Harford County, seed from New York produced plants showed seventy-three per cent. pod infection, Michigan seed, fifty-one per cent. infection, and Idaho, four per cent. Tests conducted by the University of Maryland Experiment Station at Ridgely, at College Park and at Bel Air with seed from various sources seemed to show little difference in freedom from anthracnose. The plots, however, were close together and the disease might easily have spread from one plot to another.

Most of the Extension Service work with canning crops during the year was conducted in close co-operation with the Tri-State Packers' Association. The interest in canning crops improvement projects seems to be on the increase and much effective work in the near future is anticipated.

ENTOMOLOGY

Ernest N. Cory, Specialist

In conformity with our program of work for 1927, efforts were concentrated on three of the four projects outlined at the beginning of the season. The spray service to the fruit growers stressed the control of the codling moth by early sprays, thereby reducing the need for late sprays which would leave an arsenical residue. The codling moth situation has turned out very satisfactorily in practically all sections of the State, and the survey of the arsenical residue situation, in co-operation with the State Department of Foods and Drugs, showed

only one case in which the arsenical residue exceeded the tolerance. This was at a period in advance of harvest time, and at the harvest time no excessive arsenical residues were present upon Maryland fruit.

The project on melon insects occupied considerable time of Mr. Sanders, who had thirteen result demonstrations on cucumber beetle control, following twelve meetings with a total attendance of 514 farmers. The demonstrations resulted in a rather widespread use of gypsum dusts and the purchase of a good many dusting machines by farmers. A series of result demonstrations on the control of the squash lady beetle injuring pumpkins might also be considered under this heading, a pyrethrum spray proving 100 per cent. effective in this connection.

Educational work on insects introduced, or likely to be introduced, into the State was prosecuted vigorously. Surveys on the distribution of the Mexican bean beetle, the Japanese beetle, European corn borer and the potato tuber moth were conducted in some instances by State or Federal forces, alone, or in other cases by co-operative endeavor. Surveys of the Mexican bean beetle were conducted in Allegany, Washington, Frederick, Montgomery, Carroll and Harford Counties.

Meetings to discuss the European corn borer were held in twenty-three places, with a total attendance of 1,393. At these meetings slides or films, or both, were shown.

An extensive survey of the Japanese beetle situation revealed the presence of the beetle in five localities in the State, and an agreement was reached with the Federal Horticultural Board with regard to the treatment of these areas for the control of any grubs that might possibly be present.

In addition to the above educational work, special exhibits featuring the insects introduced, or likely to be introduced, were staged at five county fairs. Emergency insect control demonstrations were held on a large variety of crops.

The apicultural work was continued, special stress being made upon educational efforts through the meetings of the Maryland State Beekeepers' Association. Three field meetings were held during the year with a satisfactory attendance.

PLANT PATHOLOGY

R. A. Jehle, Specialist

Extension work in Plant Pathology was conducted by Dr. R. A. Jehle, Specialist in Plant Pathology, C. E. Temple, State Plant Pathologist, and H. A. Hunter, Assistant Extension Pathologist. On October 1st, Mr. Hunter was transferred to canning crops work with the title of Canning Crops Pathologist.

Among the more important crops worked with in an effort to control plant diseases may be mentioned, beans, cabbage, cantaloupes, corn, cucumbers, Irish and sweet potatoes, oats, apples, peaches, tobacco, tomatoes and wheat.

The methods used in teaching subject matter to the farmers of the State consisted of demonstrations with individuals, demonstration meetings, lectures, tours, posters, circular letters and cards, bulletins and circulars, and individual instructions.

Bean Anthracnose

The necessity for controlling anthracnose is becoming greater every year because the production of beans, both for the market and for canning, is steadily increasing and also because food inspectors are becoming so strict that canned beans must be free from disease.

Field inspections of beans from eastern and western grown seed show that there is considerably more anthracnose early in the season on the beans from the eastern seed. Later in the season the difference is not so evident but it seems significant enough to advise the use of seed from the arid west. Field tests were conducted to determine the relative value of eastern- and western-grown seed. In the absence of disease there seems to be little to recommend one source over the other.

Wheat Treatment

A survey of the important wheat growing regions of the State shows that the amount of smut was greater in 1927 than in 1926. In 1926 only 15 per cent. of the fields had more than one per cent of the heads infected and 72 per cent. had only a trace or none; whereas in 1927, 40 per cent. of the fields inspected had one per cent or more and only 44 per cent. had a trace or none.

There was a large increase in the amount of wheat treated. About 28,986 pounds of copper carbonate dust were used and 203,533 bushels of seed were treated. There are now 439 home-made and 14 commercial treating machines in the State.

Demonstrations in the control of loose smut in oats by seed treatment with Formaldehyde, reduced the amount of disease to a negligible quantity.

Potato Seed Certification

The number of requests for seed certification this year was about double that for 1926. Inspections were made of 411.5 acres this year, and 32,078 bushels were eligible for certification, as against 248 acres and 18,390 bushels in 1926. Prior to 1926, practically all of the seed eligible for certification was sold locally and tags were not requested. In 1926 about two cars were shipped with tags from Worcester County. This year there was an unusual demand for certified seed from the neighboring states, particularly New Jersey, and 15 cars of certified seed had been shipped by November 15th, with the probabilities that five or ten more cars would be shipped later.

Figuring the increased value of certified seed at 50 cents a bushel, the value of the work to Worcester County alone would be over \$12,000.

Inspections for certification of sweet potatoes were made for 29 growers with a total acreage of 119 acres, or about 100 per cent. increase over last year. This is the second year that an attempt has been made to certify sweet potatoes.

The great reduction in yield of the McCormick potatoes due to mosaic has made it necessary to substitute other varieties for the fall crop. Tests were conducted to determine the best variety for this purpose. At present the Jersey Red Skin is the most popular. It has many of the good qualities of the McCormick, and is much more resistant to mosaic, but the tubers are apt to be small and rough in unfavorable seasons.

Control of Cucumber Mosaic

This disease was known to be severe in the State for the first time in 1926, when fields were inspected which had as much as 98 per cent infection and which were total losses. The

loss in Wicomico County was estimated at 300 cars, valued at \$100,000.

Demonstrations were conducted with six farmers in Wicomico County on eradicating the weed carriers of the disease and roguing out cucumber vines as soon as they showed symptoms of the disease. A report of the work with the six co-operators shows an average acre yield this year of 475 bushels as against 84 bushels for 1926.

Tobacco Diseases

Mosaic and wildfire are the two diseases causing greatest losses of tobacco in Maryland. Wildfire was very severe in the seed beds this year and concentrated effort was made to get the farmers in Southern Maryland to spray or dust their beds. As a result about three-fourths of the beds in the State were either sprayed or dusted, giving the value conservatively estimated at \$25,000.

Other Work

The specialists continued to co-operate with members of the entomology and horticultural departments in giving fruit growers timely information for sprays.

The method of selecting corn for freedom from internal cob discoloration was demonstrated and discussed at a number of meetings. The practice of spraying or dusting cantaloupes for control of anthracnose and blights was continued by many growers with good results. Demonstrations in dusting were satisfactory in reducing the amount of disease.

Treatments of cabbage seed with organic mercury compounds for the control of seed bed parasites were continued.

Repeated tests with the Marglobe tomato show that it resists *Fusarium* wilt, yields well and is a good slicing and canning tomato.

MARKETING

S. B. Shaw, Chief Inspector

During the past five years there has been an ever increasing interest manifested in the marketing of farm products. This has come about largely as a result of changes in methods of production, transportation and distribution which have constantly been taking place and which are but the results of

economic development. While each of these changes presents a different problem, it is believed that the foundation of a solution can best be started with the practice of a more careful system of grading and packing and with a better knowledge of market conditions. With this end in view, the activities of the Department of Markets have been designed to bring about a better and more profitable distribution of agricultural products. Various methods of procedure have been followed, the most important of which are shipping point inspection and market reporting.

Shipping Point Inspection

The primary purpose of Federal-State Shipping Point Inspection is to inspect and certify the kind, character, quality and condition of various agricultural products at the time of shipment from points of origin.

It is difficult to estimate the actual monetary value of shipping point inspection and equally as difficult to determine the indirect value of such service. It is reasonable to believe that an increasing number of growers are coming to a keener realization of the service, especially as it affects their methods of grading and packing. They are understanding more fully the benefits of having a reliable and impartial analysis made of their harvesting and packing operations.

Undoubtedly shipping point inspection has accomplished more in bringing about the practical application and benefits of standardization than have all other agencies combined.

Federal-State Shipping Point Inspection was first used in Maryland in 1924 during which time the service was restricted to apple and peach shipments from the western part of the State, principally in the Hancock section. The following year the service was extended to various parts of the Eastern Shore and included not only apples and peaches, but also Irish potatoes and sweet potatoes, cucumbers, tomatoes and strawberries. By 1926 the service was being made use of at practically all of the principal shipping points and by a majority of shippers.

During the 1927 season, inspection service was provided as heretofore but the number of cars inspected was much less than in 1926. This was due largely to a light apple and peach crop and a comparatively inactive market for sweet potatoes.

The service this year began June 28th with Irish potatoes and early apples and continued until November 11th, when the last car of apples was inspected. Work started five weeks later than last year and ended a week earlier so that the service was maintained for a little less than five months. During this time 1,682 cars were inspected for 46 applicants.

The total estimated f.o.b. shipping point valuation of the 1,682 cars inspected was \$1,148,267.

A comparison of this year's estimated average f.o.b. prices with those of the past two years shows some variation. To a great extent this is but a reflection of crop production. An exception to this is the 1927 price of Irish potatoes as compared with that of 1926. Notwithstanding the fact that the crop this year was much larger than that of last year, there was an average increase of 10 cents per barrel in price. This condition was brought about by the more timely and uniform distribution of the crop.

The entire cost of inspecting 1682 cars was \$6,478.60, an average of \$3.85 per car or slightly more than one half of one per cent. of the total f.o.b. shipping point value of the products. This is four-tenths of one per cent. less than the cost in 1926, or an average reduction of \$0.61 per car.

Irish Potato Inspection. The commercial production of Maryland grown Irish potatoes is centered in Worcester County. A total of 1022 cars of potatoes was inspected for 13 applicants. Of these, 762 went out as U. S. No. 1; 11 as U. S. No. 2 and 249 failed to meet grade requirements. This shows that 74.5 per cent. of the shipments were U. S. No. 1 stock, or an increase of 9.2 per cent. in the number of cars of this grade as compared with corresponding shipments made last year.

As a result of favorable weather conditions, a larger crop of better quality was produced than had been anticipated. Production on the Eastern Shore of Maryland and Virginia to and including August 12th was 21,247 cars as compared with 13,838 cars on the same date in 1926. With this increased yield it was reasonable to believe that prices would be low for such had been the case in previous years when conditions were similar.

In some instances prices did drop during certain weeks but it is estimated that the average f.o.b. price for the season was 10 cents per barrel more than in 1926. The average price did not go below \$3.00 until after July 23rd.

During the winter and early spring of this year, potato growers of Accomac and Northampton Counties, Virginia, formed an organization for the purpose of bringing about a more orderly distribution of the Eastern Shore crop. In co-operation with local distributing agencies and others financially interested, a Quotations Committee was named, the functions of which were designed to regulate, insofar as possible, the harvesting, loading and shipment of Irish potatoes in the two Virginia counties and to prevent price cutting on the part of various distributors.

The following is quoted from a report of E. W. Ross, Secretary of the Quotations Committee:

"There were between four million and five million barrels of Irish potatoes grown on the Peninsula this year (1927) and a net excess return of \$1.00 per barrel to the grower over what would have accrued under the old method of marketing is in no sense exaggeration."

The distribution of the potatoes shipped from Maryland this year during the period beginning July 13th and ending August 12th was made to 203 markets in 26 states and to four markets in Canada.

Apple Inspection. This is the fourth season that shipping point inspection service has been used by apple growers. The total number of inspections made, however, was much lighter and markets were more active. Four hundred and seventy-one cars were inspected for 22 applicants.

As heretofore, the greatest demand for this service was at Hancock, Easton and Berlin. The season opened on the Eastern Shore with Yellow Transparent and finished in Western Maryland with York Imperial.

The average estimated f.o.b. price for the State as a whole was \$4.00 per barrel as compared with \$2.50 per barrel last year. Growers and shippers continued to use more care in their methods of grading and packing. Of the 471 cars inspected, only 25 failed to meet grade requirements. This was

a reduction of 4.7 per cent. in the number failing to grade last year.

Peach Inspection. The peach crop this year was considerably lighter than that of last year and the number of inspections made was correspondingly smaller. Most of the work was done on the Eastern Shore at Berlin, Hurlock and Easton. The only fruit covered in Western Maryland was at Smithsburg. Of the 104 cars inspected for seven applicants, but 12.5 per cent. failed to meet grade requirements. This was quite an improvement over last year when 30.4 per cent. of the cars inspected were not in grade. This certainly seems to indicate that peach growers used greater care in their harvesting, grading and packing operations. The estimated f.o.b. average was \$2.00 per bushel as compared with a similar average of 60 cents per bushel last year.

Cucumber Inspection. For the past three years an attempt has been made to provide shipping point inspection for cucumbers. Most of the crop is sold by individual farmers through brokers on local auction blocks. Because of this fact, it is difficult to provide a service that would be adequate and at a reasonable expense. A service which would be satisfactory to all concerned and which would be of decided benefit could be established if the local brokers co-operated to that extent.

At Pocomoke, inspection was continued by the Peninsula Produce Exchange. Only six cars of cucumbers were handled by that organization this year but each one was a U. S. No. 1 car.

Sweet Potato Inspection. From figures obtained in connection with the Market News Service at Pocomoke, Maryland, sweet potatoes were distributed in 86 markets of 17 states and five markets in Canada. While these figures do not represent the entire shipment for the season, they indicate the distribution of the Maryland product.

Tomato Inspection. The unfavorable conditions which surrounded the production and sale of early green-wrap tomatoes last season were reflected in this year's crop which was considerably curtailed. Growers in the neighborhood of Pocomoke, however, continued their production even though it was limited. A total of 17 cars was inspected, 14 of which graded

U. S. No. 1. Prices this year showed a slight increase of 10 cents per carrier over those of last year. This is 60 cents less than the price received in 1925.

Pear Inspection. This is the first season that inspection service has been given on pears. Inasmuch as a part of the crop inspected was intended for export, the service rendered included not only the actual certification of each car, but was also supervised as to the grading and packing operations. It was reported by the shipper that the cars exported returned a higher price than similar stock on the same market. The average net return on all pears shipped was 75 cents per bushel.

Market Reporting

Market reporting is a service designed to furnish timely information concerning market receipts and prices, in order that producers may be enabled to more intelligently distribute their products. Such information must be accurate and it must be released promptly. In addition to the continuation of the daily reporting of the Baltimore City market which is carried on in co-operation with the U. S. Bureau of Agricultural Economics, the daily market news service was again provided on the Eastern Shore of Maryland. This service began with Irish potatoes and continued through the season with cantaloupes, cucumbers and sweet potatoes, closing with the latter crop on September 30th.

The number of daily reports issued and the number of each mailing list is as follows:

Commodity.	No. of Reports.	Number on Mailing List.
Irish potatoes	52	904
Sweet potatoes	36	950
Cantaloupes	21	700
Cucumbers	23	675

A total of 132 reports were mailed to a combined list of 3,229 growers and shippers, which is an increase of approximately 100 per cent. in the number of persons on the mailing list last season.

In co-operation with the Grain, Hay and Feed Division of the U. S. Bureau of Agricultural Economics, there was issued a weekly news letter on the soft winter wheat market situa-

tion beginning August 24th continuing through to and including the week of October 26th. These reports contained a brief paragraph on the world market situation, one on the national situation and a third covered local conditions with particular reference to Pennsylvania, Maryland and Virginia; and the Philadelphia, Baltimore and Richmond markets.

In co-operation with the Livestock, Meats and Wool Division of the U. S. Bureau of Agricultural Economics, special arrangements have been made for supplying each county agent who so desires, daily and weekly reports on the principal livestock markets.

The monthly market news letter which goes to a mailing list of over 400, is issued regularly and seems to be meeting with the approval of its readers.

Marketing Surveys

Various marketing surveys were conducted during the year including a survey of the marketing of sweet potatoes on the Eastern Shore Peninsula and a five-year average carlot unloads of various markets of apples produced in the Potomac-Shenandoah-Cumberland sections of Pennsylvania, Maryland, West Virginia and Virginia as compared with corresponding unloads from competitive states of the middle West, Northwest and Northeast. Similar surveys were also made with respect to the distribution of cantaloupes, cucumbers, strawberries and Irish potatoes as shipped from the Eastern Shore sections to various markets as compared with similar shipments from competitive states to these same markets. The tabulated results of these surveys and charts prepared therefrom were used at a number of conferences held in different parts of the State throughout the year.

Another survey which was made, had to do with the relocation of the Washington Farmers' Market. As a part of the program for new federal buildings in the District of Columbia, the Public Buildings Commission selected as a location for one of the new departmental buildings a part of that portion of ground set aside by Congress in 1870 for the Farmers' Market. Of the 500 farmers doing an annual business estimated at approximately \$2,500,000 who hold permits for space in this market, approximately 350 are from Maryland.

In co-operation with a committee of the Prince George's County Pomona Grange and representatives of the Extension Service, University of Maryland, a survey of the entire situation was conducted. Conferences were had with representatives of the U. S. Department of Agriculture, members of the Park and Planning Commission, Superintendent of Weights and Measures of the District of Columbia, members of farm organizations and representatives of various allied trade and business organizations. After a complete analysis of the situation, a brief was presented to the District Commissioners in which the advantages of relocating the Farmers' Market in Block 669 in the Eckington Area were clearly defined. Maps showing the various routes which could be most advantageously traveled to and from the market, and blue prints showing the adaptability of the present market requirements to the new location were prepared and submitted. Hearings before Congressional Committees, District Commissioners and the Park and Planning Commission were participated in. Nothing definite can be said at this time as to the outcome of the work, owing to the fact that Congress has not as yet reached a decision with respect to the relocation of this market.

Studies of consumers' preference with respect to apple consumption are being made on the Baltimore Market by Dr. S. H. De Vault, Head of the Department of Agricultural Economics of the University, co-operating with the Extension Service. A similar survey and study is being made by Dr. De Vault and members of his department of the cost of production, manufacture and distribution of canned food products in Maryland.

In co-operation with the U. S. Bureau of Agricultural Economics and the Department of Agricultural Economics of the University, a survey is being made of livestock marketing in Baltimore.

A survey to determine the desirability of adopting U. S. Grades for Maryland tobacco is being carried on in co-operation with the U. S. Bureau of Agricultural Economics. Tentative grades for Maryland tobacco have been prepared. Conferences have been held with various commission merchants and buyers on the Baltimore market with representatives of the State Tobacco Warehouse and with leading growers. Final

action as to the use of these grades is pending due to the fact that arrangements have not as yet been perfected for inspection.

Dairy Marketing

There have been no unusual developments in the marketing of dairy products in the State during the past year. Probably those farmers who are engaged in this business have continued in a more satisfactory situation than have those in any other group of producers. As reported by the three principal dairy marketing organizations, the value of fluid milk marketed co-operatively through these agencies in 1927 amounted to approximately \$15,597,735.

Apparently the Maryland State Dairyman's Association of Baltimore, the Inter-State Milk Producers Association at Philadelphia and the Maryland-Virginia Milk Producers Association of Washington, D. C., all have had a successful season with no particular break in the even tenor of their progress.

The Maryland State Dairyman's Association has continued during the past year, to make its influence felt especially in the development of a greater consumption of milk products and in the delivery to Baltimore City of a higher quality product. Close co-operation continues to be maintained, through the Baltimore Dairy Council, with dealers, in the promotion of a general educational program emphasizing the value of milk as a food.

No change in the plan for determining the basic price paid to producers has been made. According to Mr. I. W. Heaps, Secretary-Treasurer of the Association, "The dealers pay basic price for the amount of milk equal to 100 per cent. of the monthly fluid milk sales, and at any time when the fluid milk sales equal an amount greater than the total amount of basic milk allocated to the shipper, milk is then transferred from Class 2 (Surplus) to Class 1 (Basic) from those shippers producing the highest per cent. of Class 2 (Surplus) milk during the previous fall months. By this method the Association has been able to control the production of Class 1 or basic milk, and give each farmer, who wishes to increase his production, his proportionate share of the fluid milk market. Due to this fact the Association is not demanding that the dealer pay basic price for more milk than he can actually sell as fluid milk.

The Association has been able to maintain a price of 33 cents per gallon for basic or Class 1 milk. This is the basis on which the Association has been marketing its milk during the past four years, and has made it possible to return to the farmer a higher weighted average price. This weighted average price has been 31½ cents per gallon to the farmer f.o.b. City, for the past 12 months. There has been only one change in the price of Class 1 (Basic) milk during the past four years, which took place in October 1926 when the price of Class 1 milk was raised two cents per gallon to the producer."

During the past year the Association has handled a daily average of approximately 60,000 gallons of milk. This represents a yearly business amounting to about \$7,105,880.17.

The Inter-State Milk Producers Association has continued satisfactory operations with local units in practically all the counties on the Eastern Shore. No apparent difficulties have arisen and the basic price of 32 cents per gallon has been maintained. The weighted average price during 1927 has been 32.43 cents per gallon. During 1926 this Association received 13,629,564 gallons of milk at Maryland delivery points and approximately 3,000,000 gallons of additional Maryland milk at Delaware receiving points. Data for 1927 is not yet obtainable but according to the Association, this year's production will be from 12 to 15 per cent. above that of last year. This would indicate that the Association's business in Maryland Milk this year would amount to about \$6,094,000.

The Maryland-Virginia Milk Producers Association has also continued to make satisfactory progress during the year. Judging from a letter recently sent to all shippers, satisfactory adjustments have been made in regard to the surplus situation. This Association has contributed towards increasing the consumption of milk products and in the delivery to Washington of a higher quality product. A basic price of 33 cents for four per cent. milk has been maintained with a six cent differential. The weighted average price during 1927 has been 32.45 cents per gallon. The daily average amount of milk handled from Maryland territory has been about 22,000 gallons. This shows a yearly business in Maryland milk of approximately \$2,605,735.

Tobacco

The marketing of Maryland tobacco has been carried on this year the same as heretofore. Figures are not available as to the total amount of tobacco sold this year on the Baltimore market but the Maryland Tobacco Growers' Association has sold 17,237 hogsheads with an average weight of 600 pounds each, and it is estimated that this represents at least 50 per cent. of the total sales. Prices have varied according to grade. Low grades have brought correspondingly low prices but high grade cigarette tobacco has sold very satisfactorily. According to reports received, the average price for this season has been approximately 21 cents per pound. This would indicate that the estimated sales of Maryland tobacco this year would amount to approximately \$4,344,000. From present indications this amount will be increased next year, due to the fact of increased demands for higher grades of cigarette tobacco and the prospects of a considerable improvement in the quality of this year's crop. It has been estimated that when the crop comes on the market next year, about 80 per cent. of it will go into cigarette grades.

The Maryland Tobacco Growers' Association has continued to function in the same satisfactory manner as in years past. A slight increase has been made in the membership which now numbers 4,950.

Wool Pool

In co-operation with the Maryland Agricultural Society, the Maryland Farm Bureau Federation, a pool was formed in conjunction with the states of Virginia and West Virginia for the handling of the 1926 crop of wool. A total of approximately 200,000 pounds of wool was assembled in Baltimore, and with the exception of a part of the clip from West Virginia, all this wool was graded in Baltimore under the supervision of Mr. Keathly of the Virginia Division of Markets. Contract was entered into with a local Baltimore firm for the handling of this wool.

Unfavorable market conditions delayed the sale of the 1926 crop of wool. As a result of the experience gained in handling this pool, it was believed that a continuation of such a method of procedure would be justifiable but under certain changes in the methods of procedure. After a number of con-

ferences held in Baltimore with representatives of the State Farm Bureau Federation and the University of Maryland Extension Service, arrangements were finally perfected for the assembling of a 1927 pool.

In order that this work could be carried on systematically throughout the entire State, three regional conferences were held, one at Easton, one at Upper Marlboro and one at Frederick. Results of the 1926 wool pool were presented and recommendations made for the establishment of a 1927 wool pool. Following these conferences, arrangements were perfected for the securing of storage facilities and for the provision and distribution of necessary supplies. Directions were also furnished to all Farm Bureau representatives, county agents and sheep growers concerning the clipping, handling and shipping of wool. As the season progressed it was evident that because of prices which local buyers were able to pay, there would not be much wool available to maintain a pool. There were, however, 5,400 pounds assembled and pooled at an average price of 42 cents per pound.

Poultry

Practically no changes have occurred during the past year in connection with the direct marketing of poultry and eggs but considerable interest has centered around the improvement of breeding stock and certification of products put out by hatcherymen. A very interesting and well attended conference of Maryland poultry breeders was held at College Park on June 24th at which time considerable interest was manifested in certification work. Following this meeting a number of conferences were held with representatives of the nearby states, the purpose of which was to bring about the adoption of a uniform national plan and the use of uniform terminology which could be used by the industry as a whole throughout the entire United States. A number of national and international conferences were attended in this respect. The final outcome of this work was the action taken at the National Poultry Conference held in Chicago on November 30th at which time the plan proposed by the United States Department of Agriculture was adopted by a vote of 23 to 12. Only qualified delegates from the different states were permitted to vote in this conference and in practically every in-

stance such delegates voted under instructions from the state poultry industry which they represented. The plan as finally presented by the Federal Department coincided almost entirely with the plan which had been adopted by Maryland. This plan was presented at the meeting of the State Poultry Association held on December 14th. It was endorsed in principle by that organization and referred to the Executive Committee for final and official action.

Co-operative Purchasing

During the current year co-operative purchasing of farm supplies has been carried on as heretofore, through the Agricultural Corporation of Maryland and various county co-operative purchasing associations. The total volume of business reported by Extension Agents for the entire State amounts to \$1,584,753.12. The business of the Agricultural Corporation from January 1st to November 30th amounted to \$698,545.64; the remainder was carried on by the various county and local units.

Seed Certification

Work which has been done in co-operation with the Maryland Seed Certification Board and which was established in 1924, has progressed very satisfactorily. The work has been done in connection with wheat, sweet potatoes and Irish potatoes.

In 1927 inspections of wheat were made of 586 acres for 19 growers in seven counties. Because of unfavorable weather conditions none of the wheat was certified but on 12 farms it was listed.

This year 119 acres of sweet potatoes were inspected for 28 growers in three counties. Inasmuch as the crop will remain in storage until spring, figures are not available as to the amount which will be certified and sold under tag and seal.

From all the work that has been done in seed certification, that in which the greatest amount of progress has been made is with Irish potatoes. This year 421 acres were inspected for 74 growers in 10 counties. It is estimated that the production on this acreage will be about 36,476 bushels. To date

15 cars of this certified seed have already been sealed and tagged and shipped to various points outside the State and it is estimated that at least 10 more cars will be sold in the same manner.

Production of certified and listed seed is a profitable undertaking. It is reported that wheat growers have sold certified and listed wheat at prices ranging from 50 to 75 cents per bushel more than the general farm crop.

It is too early in the season to report as to the price of certified sweet potato seed, but during the present season certified Irish potatoes have sold freely at \$5.00 per barrel which is an advance of 50 cents per bushel over ordinary stock.

FORESTRY

F. B. Trenk, Specialist

Forestry work involved four major objectives during the past year:

1. Forest planting on waste, abandoned or eroded land;
2. Thinning and improvement cutting in immature and cut-over stands of timber;
3. Proper logging methods and utilization in merchantable stands of timber;
4. Planting windbreaks and shelterbelts.

Since Maryland is over 22 per cent. forested, and has a total waste land area of approximately 350,000 acres, all of which could and should be producing a crop of timber, the need for stressing the forest planting and woodland management phases of the project are readily evident.

Plantings

A total of 19 planting demonstrations were conducted in 10 counties, in co-operation with the county agents, and these demonstrations involved planting 35,000 trees. Most of the trees planted were loblolly pines and plantations of this species were restricted to Southern Maryland and the Eastern Shore. Included among these demonstrations, however, is the first large plantation, consisting entirely of red and white oak seedlings, to be made by a farmer in the State. Other species of trees planted were red pine, white pine, Norway spruce, black walnut, Scotch pine and black locust.

Although no 4-H Forestry clubs have been organized, the interest shown by boys and girls in the planting work has been most gratifying. The 4-H club camp grounds in Harford County was the scene of another annual planting "Bee" early in April, when a block of red pine was set out on a small area within the camp grounds. A driving, cold rain was not sufficient to keep a large number of boys and girls from making their pine plantation. Further evidence of the interest in forest planting which has developed among the boys and girls was shown at a planting demonstration in Anne Arundel County, when the entire Tracey's Landing High School attended and took part. This plantation is only a few hundred yards distant from the high school, and will no doubt attract the attention of many future classes of high school students.

The high percentage of survival of young trees in plantations set out this year is noteworthy. Practically all plantations which have been inspected during the fall showed survival percentages above 90, while two plantations, set out under only moderately favorable conditions, showed survival percentages of 98 and 99.5 respectively.

Woodland Improvement Work

Woodland examinations and thinning demonstrations were means employed by the extension forester to direct the attention of farmers to the value of caring for their timber crop. Ten thinning demonstrations were held in five counties. Five of these demonstrations were held in connection with the Smith-Hughes agricultural teachers in Frederick and Washington counties, and preliminary arrangements were made by District Forest Warden C. Cyril Klein, of the State Forestry Department.

Fifteen woodland examinations were made for as many timberland owners in seven counties, and the total area of timberland so examined included 12,142 acres. Through the medium of the woodland examination, which usually results in improved forestry practices on the part of the woodland owner, it is possible to develop a wide range of result demonstrations.

A feature of the woodland thinning demonstration work was the development of interest among farmers by holding demonstrations in the nature of contests, with an axe as first prize, and a hatchet as second prize. Banks, hardware dealers, service clubs, wood-working plants, and bankers co-operated with the Service in making prizes available.

Lectures and Exhibits

The extension forester has given 18 lectures in seven counties, before audiences totaling 1183 persons. Twelve of these were illustrated either by lantern slides or moving pictures or both. One radio address was given over Station WMAL in Washington, D. C.

Wider use of exhibit material was made during the past year than in previous years. Eleven showings of exhibit material were made in 10 counties. Woodland management, fire protection, forest planting, and roadside tree planting were the principal topics developed through these exhibits.

The most notable exhibit was that shown at the Baltimore and Ohio Centennial Celebration at Halethorpe from September 24 to October 15. This exhibit consisted of four large semi-circular panels, upon which were enlarged photographs tinted in oil. It is estimated that not less than 700,000 persons saw this exhibit. According to the Baltimore and Ohio Railroad, a total of 1,350,000 persons attended the celebration, so that the above estimate is believed to be conservative.

Club Work

In addition to the planting work already reported in which club members engaged, two 4-H clubs in Dorchester county did creditable work in collecting 145 bushels of loblolly pine cones, which were purchased by the State Forestry Department, to supply its needs for pine seed. The fact that the boys had to climb standing trees for all of these cones attests to their determination to carry through with the project they had undertaken.

During State Club Week, which was held at the University of Maryland, 20 boys elected to give especial attention to forestry, and in connection with the brief instruction period allotted for this work, these boys set out the nucleus of what

is planned to be a permanent 4-H club loblolly pine forest. Each succeeding year, additions are to be made to this plantation. The land to be used for this plantation has been purposely set aside by the owner for this purpose. It is located less than two miles from the University campus, and hence, will be a valuable result demonstration plot for Farmers' Day gatherings in the future, as well as for 4-H club meetings.

Miscellaneous

Ten news items pertaining to forestry were prepared for the press. Fifty-eight conferences were held with woodland owners, where it was impossible to make a direct examination of the woodlands in question. A bulletin on windbreaks and shelterbelts was completed. Two windbreak planting demonstrations were conducted.

The co-operation of the State Forester, Mr. F. W. Besley, and members of the State Forestry Department Staff, has aided materially in developing the forestry project.

GENERAL EDUCATION EXTENSION

During the past year the regular work under General Education has been conducted with Prof. C. S. Richardson in charge. This included lectures, motion pictures, correspondence courses and miscellaneous educational work.

Motion Pictures

A limited number of motion pictures are held for distribution to rural centers. With the co-operation of the U. S. Department of Agriculture we have been able to supply the needs of various communities for educational films. There is quite a demand for educational films and we are hoping that additional funds will be available to purchase films for meeting these demands on the part of the people. A total of 70 films are available in this office.

Correspondence Courses

Only a limited amount of work has been done in this phase of Educational Extension Work owing to lack of facilities. It does not seem possible for us to develop our correspondence course work due to pressure of duties on the regular profes-

sors at College and lack of time on the part of specialists. During the year 22 students have enrolled in the various courses. We are hopeful that this work can be developed.

Radio Work

Perhaps this phase of Educational Extension has been more active than any other. From October 1st up to the present Farm Flashes have been given over WRC in co-operation with the U. S. Department of Agriculture. These will continue until May 1st. These noon talks were given in the form of lectures and dialogues and covered various phases of agriculture. In addition one lecture a week has been given by various specialists of the institution over WMAL.

This work has been in charge of Mr. R. M. Watkins with the assistance of Mr. M. D. Bowers of the Extension Staff.

Fine returns have been received from this radio work and it is felt that it is about as extensive as required at this time.

Lectures

The usual number of lectures have been given under the jurisdiction of this department to various organizations and community meetings as well as other public functions in the State. Prof. C. S. Richardson, assisted by various members of the University as well as Extension Service Staff, has been able to meet the demands for this class of work.

Our hope has been to develop a series of lectures on subjects other than agriculture, believing that farmers would enjoy lectures on cultural subjects on special occasions which would be interesting and valuable to the community. Some work along this line is to be developed during the ensuing year.

MISCELLANEOUS WORK

Under this heading may be cited miscellaneous Extension Work that is carried on by specialists connected with other divisions of the institution. Frequently the demand for special work required the aid of specialists of the Experiment Station and College of Agriculture.

Prof. J. E. Metzger and Dr. A. G. McCall of the Experiment Station and Prof. W. B. Kemp and Dr. E. M. Pickens of the College of Agriculture have been most helpful in connection with this character of work.

The Service is especially indebted to Dr. H. J. Patterson, Director of the Experiment Station and Dean of the College of Agriculture, for his cordial co-operation and helpful suggestions at all times.

Fairs

Every effort has been made by the Service to assist in the development of agricultural exhibits at State, County and Community fairs. A special exhibit was arranged at the Timonium Fair concentrating this year on the following subjects: Dairying, women's work, plant pathology and entomology. It seemed better to arrange this exhibit around these four leading subjects than to attempt to cover a large group. Exhibits have been made at eight County fairs.

Extension Schools

There has been a reasonable demand for Extension Schools or Short Courses in various Counties of the State during the past year. Several of these courses have been developed in co-operation with the vocational students in the high schools. These have covered primarily feeds, breeding, dairy husbandry, horticulture, spraying, farm accounts, etc. It has been the aim of the Service not to unduly promote these courses, but to meet the demands as developed from the several communities. It is believed that there is a growing demand for this character of assistance in rural communities.

SOUTHERN MARYLAND IMMIGRATION COMMISSION

The Extension Service has co-operated in every possible manner with the Southern Maryland Immigration Commission in its efforts to develop the possibilities of Southern Maryland.

During the past year, at the request of the Commission, the Director of the Extension Service has served as secretary of the Commission. While the Commission legally closed its active work September 30, 1927, there remained a number of features of the work to be completed and which have been continued during the past months. Mr. M. D. Bowers and the writer have co-operated in the publication of a pamphlet describing the resources of Southern Maryland. This publication will receive general distribution over the State as well as elsewhere.

CONCLUSION

The work of the Extension Service is thus set forth in this summarized report. I wish space would permit giving in greater detail the splendid work that is being done along many lines by both the men and women specialists and agents. The agents' reports are such as we can feel proud of, containing as they do a volume of data on the progress of their work in the respective counties. We were fortunate in not having a large turn-over in our agency force the past year.

We are indebted to the boards of county commissioners for their loyal support and active co-operation in providing for the support of agents in the counties. We are grateful for the cordial co-operation of the farm organizations, including the Grange, Farm Bureau, women's clubs, etc.

No State offers greater opportunities for Extension work than Maryland. Substantial progress has been made and it is believed that even greater progress will crown our efforts in the future in assisting our people to provide comfortable homes and to secure those fruits of earnest effort that should result from intelligent and progressive farming.

I desire to express my deep appreciation to the members of the Extension force for their earnest co-operation and support in directing the work of the Service. We have an earnest and devoted band of workers who will spare no pains at any time to serve the farmers and farm women of this State. I wish, also, to express my appreciation to President R. A. Pearson, who has at all times given his cordial and sympathetic support in behalf of the Extension Service work.

We are all indebted to the officers and associates of the Extension Service, of the U. S. Department of Agriculture for their able assistance and co-operation in developing the work of the Service in this State.

FINANCIAL REPORT FOR THE FISCAL YEAR ENDING JUNE 30, 1927, IN ACCOUNT WITH THE UNITED STATES AND STATE APPROPRIATIONS UNDER SMITH-LEVER EXTENSION ACT, 1926-1927:

	Smith-Lever Funds		
	Total	Federal	State
Unexpended balance for 1925-26.....			
To receipts from the Treasurer of the United States and from State sources as per appropriations for the fiscal year ended June 30, 1927, under act of Congress approved May 8, 1914 (Smith-Lever Act).....	\$131,927.02	\$70,963.51	\$60,963.51
By 01 Personal Service.....	\$113,966.64	64,646.48	49,320.16
02 Supplies and Materials.....	1,495.32	8.09	1,487.23
05 Communication Service.....	582.35	82.87	499.48
06 Travel Expenses.....	12,912.79	6,150.20	6,762.59
07 Transportation of things (service).....	34.61	6.49	28.12
08 Printing, binding, and cuts for publications.....	1,464.50	62.38	1,402.12
10 Furnishing of heat, light, power, water and electricity (service).....	1,000.00	-----	1,000.00
30 Equipment.....	318.14	2.00	316.14
Miscellaneous.....	152.67	5.00	147.67
Total.....	\$131,927.02	\$70,963.51	\$60,963.51

Unexpended balance for 1925-26.....
 To receipts from the Treasurer of the United States and from State sources as per appropriations for the fiscal year ended June 30, 1927, under act of Congress approved May 8, 1914 (Smith-Lever Act).....

By 01 Personal Service.....
 02 Supplies and Materials.....
 05 Communication Service.....
 06 Travel Expenses.....
 07 Transportation of things (service).....
 08 Printing, binding, and cuts for publications.....
 10 Furnishing of heat, light, power, water and electricity (service).....
 30 Equipment.....
 Miscellaneous.....

Total.....

SUMMARY STATEMENT OF EXPENDITURES BY PROJECTS, SHOWING SOURCES OF FUNDS USED FOR
EXTENSION WORK, FISCAL YEAR ENDING JUNE 30, 1927:

Project	Total	—Smith-Lever—		College & State	County	Other
		Federal	State			
Administration.....	\$14,721.57	\$3,992.82	\$7,102.00	\$3,626.75	\$	\$
Publications.....	5,723.78	1,536.18	2,808.23	1,379.37	—	—
County Agent Work.....	104,532.12	33,513.76	20,919.57	18,342.79	31,756.00	—
Home Demonstration Work.....	83,438.24	20,204.13	9,976.07	23,854.52	27,128.00	—
Boys' Club Work.....	7,386.22	1,476.64	3,168.16	593.97	—	2,275.52
Agronomy.....	4,795.09	1,230.66	3,219.74	344.69	—	2,147.45
Animal Industry.....	4,290.37	869.15	3,101.00	320.22	—	—
Horticulture.....	7,461.94	2,867.93	3,569.66	1,024.35	—	—
Dairying.....	4,560.71	1,539.65	2,792.41	228.65	—	—
Marketing and Rural Organization.....	25,220.38	—	1,060.00	10,088.20	—	14,072.18
Poultry.....	4,447.75	1,282.59	2,806.78	358.38	—	—
Entomology.....	7,825.02	880.00	50.00	6,895.02	—	—
Pathology.....	6,965.10	1,270.00	146.70	5,548.40	—	—
General Educational Extension.....	4,487.53	—	—	4,487.53	—	—
Canning Crops.....	4,381.68	300.00	243.19	1,838.49	—	2,000.00
Farm Forestry.....	884.32	—	—	884.32	—	—
Total Expenditures.....	\$291,121.82	\$70,963.51	60,963.51	\$79,815.65	\$58,884.00	\$20,495.15

SUMMARY STATEMENT OF EXPENDITURES BY PROJECTS, SHOWING CLASSIFICATION OF EXPENDITURES FROM ALL FUNDS USED FOR EXTENSION WORK, FISCAL YEAR
ENDING JUNE 30, 1927:

	Total	Personal Service	Supplies and Materials	Communication Service	Travel Expenses	Transportation of Things	Printing, Binding and Cuts for Publications	Furnishing of Heat and Light, Power, Water and Electricity	Equipment	Miscellaneous
Administration.....	\$14,721.57	\$9,888.26	\$2,188.63	836.36		\$97.49		\$1,000.00	\$522.40	\$188.43
Publications.....	5,723.78	3,233.33		25.63	279.82		2,185.00			
County Agent Work.....	104,532.12	81,941.26	2,836.30	23.00	19,588.05	11.66				131.85
Home Demonstration Work.....	83,438.24	62,328.81	3,031.52	84.15	17,911.61	21.23			5.72	55.20
Boys' Club Work.....	7,386.22	4,083.50	22.47	2.90	3,264.16	1.14			1.05	11.00
Agronomy.....	4,795.09	3,400.80			1,394.29					
Animal Industry.....	4,290.37	3,275.00		18.13	997.24					
Horticulture.....	7,461.94	6,100.00		1.55	1,360.39					
Dairying.....	4,560.71	3,700.00		.75	859.96					
Marketing and Rural Organization.....	25,220.38	19,331.65	602.58	781.71	4,287.79	26.51			177.94	12.20
Poultry.....	4,447.75	3,310.00		2.65	1,135.10					
Entomology.....	7,825.02	5,501.00	181.98	508.47	1,471.33	27.53			128.48	6.23
Pathology.....	6,965.10	5,493.13	22.70	2.10	1,447.17					
General Educational Extension.....	4,487.53	1,288.47	462.48	2.07	866.67	1,529.74			156.18	181.92
Canning Crops.....	4,381.68	3,203.00			1,178.68					
Farm Forestry.....	884.32	300.00	19.13	2.55	562.64					
Total Expenditures.....	\$291,121.82	\$216,378.21	\$9,367.79	\$2,292.02	\$56,604.90	\$1,715.30	\$2,185.00	\$1,000.00	\$991.77	\$586.83

COUNTY HOME DEMONSTRATION AGENTS

County	Name	Headquarters
Allegany	* Maude A. Bean	Cumberland
Anne Arundel	* Mrs. Georgiana Linthicum	Annapolis
Baltimore	* Edythe M. Turner	Towson
Calvert		Prince Frederick
Caroline	* Bessie M. Spafford	Denton
Carroll	* Agnes Slindee	Westminster
Cecil	* Priscilla B. Pancoast	Elkton
Charles	* Ula F. Fay	La Plata
Dorchester	* Hattie E. Brooks	Cambridge
Frederick	* Helen E. Pearson	Frederick
Frederick	* Katherine L. Baker (Assistant)	Frederick
Garrett	* Elsie M. Benthien	Oakland
Harford	* Eva K. Schurr	Bel Air
Howard	* Vida N. Metzger	Ellicott City
Kent	* Helen N. Schellinger	Chestertown
Montgomery	* Blanche A. Corwin	Rockville
Prince George's	* Ethel M. Regan	Hyattsville
Queen Anne's		Centerville
St. Mary's	* Ethel Joy	Leonardtown
Somerset		Princess Anne
Talbot	* Mrs. Olive K. Walls (Leave of Absence)	Easton
Washington	* Ardath Martin	Hagerstown
Wicomico	* Florence H. Mason	Salisbury
Worcester	* Lucy J. Walter	Snow Hill

GARDEN SPECIALIST

Madison and Lafayette Aves. Mrs. Adelaide Derringer Baltimore
 * In co-operation with the U. S. Department of Agriculture.

EXTENSION SERVICE BULLETINS

These will be sent free of charge to any address upon receipt of application at Office of
 Extension Service, College Park, Md.

- No. 3—The Garden.
- No. 9—Electricity on the Farm.
- No. 15—Milk Cost Survey, August, 1918.
- No. 17—Boys' Corn Club Lessons.
- No. 23—Garden Flowers.
- No. 26—Co-operative Association Law of Maryland.
- No. 28—Maryland Farm Statistics (1923).
- No. 30—The Marketing of Wheat in Maryland.
- No. 32—Maryland Farm Statistics (1924).
- No. 36—Lambs and Wool for Market.
- No. 37—Winter Fattening of Steers.
- No. 39—The House Dress.
- No. 41—Loblolly Pine.
- No. 42—Windbreaks and Shelter Belts.
- No. 43—When Patterns Do Not Fit.
- No. 44—More Tomatoes from Fewer Acres.

Total Expenditures ----- \$291,121.82 \$216,318.21 \$9,361.79 \$2,292.02 \$56,604.90 \$1,715.30 \$2,185.00 \$1,000.00 \$991.77 \$586.83

SUMMARY STATEMENT OF EXPENDITURES BY PROJECTS, SHOWING CLASSIFICATION OF EXPENDITURES FROM ALL FUNDS USED FOR EXTENSION WORK, FISCAL YEAR
ENDING JUNE 30, 1927:

	Total	Personal Service	Supplies and Materials	Communication Service	Travel Expenses	Transportation of Things	Printing, Binding and Cuts for Publications	Furnishing of Heat, Light, Power, Water and Electricity	Equipment	Miscellaneous
Administration	\$14,721.57	\$9,888.26	\$2,188.63	836.36		\$97.49		\$1,000.00	\$522.40	\$188.43
Publications	5,723.78	3,233.33		25.63	279.82		2,185.00			
County Agent Work	104,532.12	81,941.26	2,836.30	23.00	19,588.05	11.66				131.85
Home Demonstration Work	83,438.24	62,328.81	3,031.52	84.15	17,911.61	21.23			5.72	55.20
Boys' Club Work	7,386.22	4,083.50	22.47	2.90	3,264.16	1.14			1.05	11.00
Agronomy	4,795.09	3,400.80			1,394.29					
Animal Industry	4,290.37	3,275.00		18.13	997.24					
Horticulture	7,461.94	6,100.00		1.55	1,360.39					
Dairying	4,560.71	3,700.00		.75	859.96					
Marketing and Rural Organization	25,220.38	19,331.65	602.58	781.71	4,287.79	26.51			177.94	12.20
Poultry	4,447.75	3,310.00		2.65	1,135.10					
Entomology	7,825.02	5,501.00	181.98	508.47	1,471.33	27.53			128.48	6.23
Pathology	6,965.10	5,493.13	22.70	2.10	1,447.17					
General Educational Extension	4,487.53	1,288.47	462.48	2.07	866.67	1,529.74			156.18	181.92
Canning Crops	4,381.68	3,203.00			1,178.68					
Farm Forestry	884.32	300.00	19.13	2.55	562.64					
Total Expenditures	\$291,121.82	\$216,378.21	\$9,367.79	\$2,292.02	\$56,604.90	\$1,715.30	\$2,185.00	\$1,000.00	\$991.77	\$586.83

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